

Railway Age

Vol. 64.

June 7, 1918

No. 23



On the Other Side of the Line—A German Light Railway Station. Photo from Press Illustrating Service

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EDITORIAL

Railway Age

By far the most important work to be accomplished by the men who will meet in Chicago at the joint convention of

Opportunities for the M. C. B. Association

the Master Car Builders' and the Master Mechanics' Associations will be the revision of the present M. C. B. Interchange Rules, in order that they may meet more adequately the requirements of the unified operation under government control. There are nowhere men more capable of doing this work than in the M. C. B. Association. It is their mission and their duty to adapt the rules to the present conditions. If they don't, somebody else will. Already some local agreements have been made to meet these new conditions, but they are not standard nor in accordance with general practice. The M. C. B. Association has here a great opportunity to justify its existence. It will do so if its members have a vision broad enough to view the unification of railways in the proper perspective. There are several important questions that have been discussed which must be settled definitely. One of these is the elimination of billing for repairs to foreign cars and an adequate method for checking the work done. Another is the advisability of adopting a "run, repair or transfer" rule. A third is the uniformity of repairs to cars. Still another, and by far the most important, is, What can be done to speed up the repairs to cars? It is the function of the M. C. B. Association to discuss all of these problems and to pass authoritatively on them. All discussion must be based on the fact that now the railroads are under government control.

Quite a large percentage of the population of the United States is foreign born or children of foreign-born parents. Far

June 14 is Flag Day

too little attention has been given to Americanizing these people; many of them cannot even speak the English language and have no conception of American ideals. This is a deplorable state under normal conditions, but is particularly dangerous in time of war. Misunderstandings in industrial plants and communities which threatened to become serious have frequently been easily adjusted by getting these people to see the situation in its proper light. These situations must, of course, be handled with patience and tact as they arise, but more than this, it is necessary that these people be thoroughly Americanized as rapidly as possible. This is all the more important because German agents find so fertile a field for spreading their propaganda among them. The railroads have many foreign-born employees and not a few Americans who need to be educated in a higher degree as to their duties and responsibilities to this country. Special attention should be given, therefore, to observing a simple Flag Day program in order that all employees may gain a clearer understanding of the war and the reasons for our participation in it, and that they may be stirred to put forth greater efforts in strengthening the transportation machine to meet the abnormal demands which are being placed upon it. A simple program has been recommended, including a flag-raising to be accompanied by singing the Star Spangled Banner, a salute to the flag with the Pledge of Allegiance, an appropriate address, and the singing of "America." Railroad officers should use their influence also

in encouraging the industries in their immediate neighborhood to observe Flag Day.

The apprehension expressed in these columns a short time ago that some railway employees, especially those in shops,

Railway Strikes in War Time

would be dissatisfied with the wage increases granted by the Railroad Administration, has been justified. Strikes have occurred in shops of the Southern Railway and the Rock Island, and more extensive trouble seems to be impending. These things have prompted Director General McAdoo to issue a statement sharply criticising employees who have struck. He reminds them that they are now working for the government, and in the present emergency should give it loyal support. As a matter of fact, there was no sufficient justification for strikes or threats of strikes on the railways before the government took over their operation. The country was at war then as now; it needed the most efficient service the railways could render then as now to enable it to carry on the war; and therefore every employee who was disloyal to the railways then was through them disloyal to the nation. Since the government assumed the operation of the railways, however, it has made special efforts to eliminate discontent and the causes of it from the ranks of railway employees. It has granted them an increase in wages, and has provided means for acting on all their legitimate complaints. In the circumstances, it would seem that the government has a right to ask railway employees to stay at their posts and render it efficient service, even though their conditions of employment and wages are not satisfactory in all respects. The government has done considerable for railway employees as a class and nothing, or even less than nothing, for railway officers as a class; and yet if railway officers should organize and threaten to leave their posts in a body they would be branded as traitors by everybody, including the railway employees. Does the fact that a man is a railway officer rather than a railway employee determine the kind and amount of duty he owes to his country in time of war?

The operation of trains over lines not used extensively may be carried out without any form of block signals, but it is

Signaling on Multiple Track Lines

necessary in the operation of an ordinary steam road at maximum capacity to use some form of block signaling, for otherwise the greatest capacity of the tracks cannot be obtained nor can train movements be made with safety. It is therefore generally recognized that signals are necessary for intensive operation with safety, and the question is, as to the manner in which this operation can be effected by signals and the character of signals necessary. The answer to this question depends to a great extent upon the kind of traffic handled and the extent to which tracks are assigned to certain classes of trains. A type of signaling that may be applicable to one road may not be suitable on another line where different operating conditions exist.

In order to derive the greatest benefit from signals, it is assumed that a careful study will be made of conditions before the type or character of equipment is recommended.

While manual block may be used to advantage in certain places, there are manifestly drawbacks to its use in the great majority of cases on busy multiple track lines. The principal disadvantage of this type of block signaling is the excessive cost for the operation of a number of block stations if any material results are to be obtained. The element then affecting track capacity is the length of the blocks. Theoretically, the shorter the blocks are, the greater is the track capacity. This is true only within certain limits. If a track is assigned to high speed passenger train operation it is necessary that such trains get the caution indication of the signal ahead at a point far enough in the rear that a service stop may be made. This means that beyond a certain limit it is not advantageous to shorten the blocks for such trains. On a track assigned exclusively to a certain class of freight trains where the speed is materially less than that on high speed passenger tracks, the blocks may be made considerably shorter as these trains can be stopped within a shorter distance. When a track is used for both high and low speed movements, a different length of block is again necessary to obtain the best results. With the proper assignment of tracks for various classes of service on a road with four or more tracks, and with these tracks properly signaled, the best use of the tracks is obtained. The tracks assigned to passenger traffic exclusively are almost without exception not used to their capacity, while the freight tracks are quite often overtaxed. The congestion on the latter can be relieved materially by running freights over the passenger tracks during certain periods. Where such use is made of these tracks, the capacity can be materially increased and this can be bettered further by the location of interlocking plants governing cross-overs at certain points.

Elsewhere in this issue is an article on the effect of signals in increasing track capacity on busy multiple track lines of this character. Inasmuch as the proper installation of automatic signals and interlocking increases the track capacity materially, and at such a low cost as compared with other means of producing the same results, it would appear advisable that such work be given careful consideration by all whose duty it is to provide increased track facilities for the present huge volume of traffic.

Time is the Important Consideration

CURRENT MAINTENANCE WORK is usually started as soon as the frost leaves the ground. In most parts of the country it is well under way by the middle of April. It is now the first of June, but only limited progress has been made, particularly in such heavy work as the renewal of rails and ties. This delay is already serious and will become increasingly so as it continues from week to week.

Most maintenance work is seasonal in character, much of it necessarily so. On the average line, forces are increased to the summer basis by April 1 and work is pushed rapidly until about July 1. By that time, particularly in the central and middle western states, the small grains are ripe and a large part of the men leave for the harvest fields, reducing the forces on the roads practically to those required for routine work only. It is then generally impossible to make much progress with the heavier work until early in September and by that time it becomes necessary to concentrate attention on the closing of the season's work and preparations for winter. Therefore, with two of the three best working months already gone it is necessary that activities be greatly increased if serious consequences are to be avoided next winter.

The need for a heavy season's work should be universally realized. There has been a gradual accumulation of deferred maintenance for the last three or four years until the

roads are now probably two full years behind their normal rail renewals. On top of this condition came the unusually severe winter with its increased wear and tear on the track. As a result more than the usual amount of work *must* be done if the roads are to go into the winter in *even as good condition* as last year.

The general uncertainty among railway men as to the government's policy is responsible for some of this year's delay. However, the most important causes contributing to this condition are shortage of labor, rails and ties, and the agencies for the relief of all of these problems have been transferred entirely or in large measure into the hands of the government.

The roads were notified early in the year that the government had taken over the purchase of rails. Since that time no rails have been ordered, and although only about 2,000,000 tons, or less than two-thirds of a normal season's requirements, are now under contract on earlier orders, only about 25,000 tons are being rolled per week, at which rate less than one-half of the tonnage now on order will be secured in time to be laid this year. The outcome of such a condition is apparent to all familiar with the maintenance of railway tracks.

Similarly conditions in the tie industry, accentuated by the centralization of purchases and inspection, are leading to a serious shortage of ties. This situation is particularly acute on those roads which use untreated ties and which do not, therefore, store them any considerable length of time. While most of those roads which treat their ties have a sufficient number on hand to meet the requirements for this season, they also will be short when this supply runs out owing to the fact that the stocks in the tie yards are not being fully replenished. The tie situation is particularly serious because good ties are absolutely essential to safe operation, furthermore, ties cannot be produced and seasoned in a day.

The shortage of labor is universal. The government took a radical step which is expected to relieve the situation considerably when it issued an order a few days ago specifying certain occupations as non-essential for men of draft age and giving men in such occupations the choice of entering industries essential to the welfare of the country or of being inducted into the army at once. The government can go still further by opening certain sources of supply which will afford further relief, particularly to the railways. For instance, it was said several months ago on the authority of the United States Department of Labor that 100,000 Porto Ricans were ready to come to this country and that shipping had been provided to bring them here. Over two months have elapsed and none of these men has been reported as arriving on the railroads in this country. Another source of labor is Mexico. The roads in the southwest have recruited their track laborers almost entirely from Mexicans for a number of years, and have found them satisfactory. This avenue was closed on May 1, 1917, by the alien immigration law, which imposed a head tax and a literacy test on all immigrants. Since that time the immigration of Mexicans has been so small as to be almost negligible. The government has recognized the existence of this source of labor by arranging for the temporary admission of agricultural laborers from that country for a period not exceeding six months. A considerable number of men were brought into the Southwest under this arrangement in 1917, and under date of April 12, 1918, the Bureau of Immigration of the United States Department of Labor issued a circular outlining the conditions under which laborers of this character may be admitted this year.

With labor available in Mexico and with the pressing need for it in this country it would seem advisable, as a matter of public policy, to lift the restrictions, at least for the duration of the war, in order that the railways and other

industries may secure the men so essential to their proper operation. Action must be taken, and taken promptly, if serious results are to be averted. As stated above, maintenance of way work is seasonal in character and must be done before fall, if at all. In the meantime the roads must soon be prepared to face another winter.

The Position of the Accounting Officers

IT IS A LONG STEP from the old conception of the railroad auditor as a confidential bookkeeper for the president of a railroad company to the recognition by the government that the accounting officers are a necessary part of the economical operation of the transportation system of the United States under government control. Charles A. Prouty, director of the Division of Public Service and Accounting of the United States Railroad Administration, was to have made an address before the Association of American Railway Accounting Officers at the annual convention at St. Louis on May 29, but, being prevented from doing so, wrote the Association a letter, setting forth his views as to the position of accounting officers under government control. In the course of this letter he says: "The operating revenues, which are reflected in the accounts kept by our accountants, belong to the United States. The director general can remove or employ any accountant upon any railroad under federal jurisdiction. Our accountants are, therefore, in a direct sense, the employees of the government." The letter is published elsewhere, together with the proceedings of the accountants' association, and it apparently clears up the situation about which some accounting officers felt more or less uncertainty.

The duty of the accounting officers who are thus taken into government service is single and undivided. Their entire responsibility is to the government. On the other hand, the association has still among its members railroad officers whose responsibility is to the stockholders and who are employed by the corporation, not by the government, and it has also among its members accounting officers of railroads which have not been taken over by the federal government, so that its responsibilities as an association are three-fold.

In commenting on the amalgamation of the various railroad associations in these columns last week, it might have been pointed out that the association of accounting officers is distinct and separate from those associations which may be combined with the American Railway Association. It would appear necessary to keep this accounting officers' association separate. Just as in a railroad company's organization, that part of the personnel which originates expenditures and receives money is kept entirely distinct from that part which audits expenditures and receipts, so it would appear to be proper to continue this broad distinction in so far as the associations are concerned.

Ever since 1906, the Association of American Railway Accounting Officers has been working in co-operation with the Interstate Commerce Commission in the perfection of a system of railway accounting, and probably the Interstate Commerce Commission, and especially those members of it who had to deal directly with the association, would be the first to acknowledge the value of the services which the association, and more especially its executive committee and committee of 25, have rendered. The continuation of the association and of the work of the committees and the meeting together of the membership is of great importance. A railroad auditor is peculiarly liable to get into a rut, to permit himself to get so close to the mass of detail work under his supervision as to lose perspective. The meetings of the association are the best and about the only antidote to this

tendency. Discussion of what the other fellow is doing; discussion of general principles and of new methods are a necessity for any progress and even for keeping abreast of day to day requirements.

A great deal of credit is due to American railway accounting officers for the independent stand which they have maintained, especially since 1906. The accounting officer was peculiarly liable to pressure from above; he was considered a non-revenue producing man. The fact that with the moral support of the government the accounting officers have stood out against their own executives in some cases and worked for a sound system of accounts open to public inspection is worthy of note. Now that the officers of the railroads under federal control become government employees, the Association can continue to perform a most important work by carrying on the ideals of sound accounting and full publicity.

The Railroad Administration and the Railway Officers

THE EFFECTIVENESS of an army of any given size depends mainly on its having enough experienced and competent officers to train, discipline and lead the soldiers in it and on the spirit of its official personnel. Even though the privates of an army are intelligent and courageous, it will not long be an efficient fighting machine unless it has plenty of good officers, and the officers are full of fighting spirit and are able to command the unstinted respect, confidence and loyalty of the men in the ranks.

The organization of a railway bears a closer resemblance to that of an army than the organization of any other kind of industrial institution. The railways of the United States have about 20,000 general and divisional officers, or approximately one officer for every 100 employees. The efficiency with which our railways have been operated in the past has been due mainly to the kind of officers they have had, from those who have had direct, detailed supervision over the work of the employees up to the presidents and the chairman of the board.

In a very large majority of cases the officers of all classes have risen from the ranks; and the higher officers usually have come up step by step through the various official grades to the positions which they now occupy. They have learned their business by experience and have owed their promotions to merit. This has not been true in every case, but the exceptions have not been numerous. Promotion having been based on merit, there has been intense emulation between ambitious officers on the same road, and between officers occupying corresponding positions on different roads, to get results which would demonstrate their superior capacity and gain for them commensurate rewards. While there has been friction, especially within recent years, between some classes of the employees, on the one side, and the officers, on the other, the men usually have had respect for and confidence in their superiors, and there has resulted the able leadership and esprit de corps which have enabled our railways to combine excellence of service with economy of expenditure as they had not been combined on any other system of railways in the world.

It is unfortunately necessary to take cognizance of the fact that recent developments have had a tendency to impair the official morale and discipline on our railways. Since government control was adopted there has been a feeling on the part of both employees and officers that the latter cannot exercise the same authority over the former that they have in the past. Furthermore, the higher officers have had a large part of their power of initiative and decision regarding important matters taken from them and transferred to the Railroad Administra-

tion. Many men of official rank, especially in the traffic department, have been dismissed from the service, and others in some departments are apprehensive regarding the future of their positions. Many in the law departments have had their salaries reduced. Finally, to mention the most conspicuous and important example of all, notice has been given that the presidents of the companies are to be superseded as the chief executive officers of the physical properties by federal managers. The federal managers will report to the regional directors, and they, in turn, to the office of the Railroad Administration at Washington.

It has been understood that many of the presidents will be offered the positions of federal managers of their railways, but it has been reported that their salaries will be sharply reduced. Questions have been raised as to the effect which this will have upon the positions of operating officers, such as vice-presidents, general managers, superintendents of motive power, chief engineers, and so on, and upon the salaries and the opportunities of such officers. There are many ambitious men of lower rank who have looked forward to the time when they would be promoted to the highest offices, and many of these have become much disturbed regarding their prospects of retaining their positions and of securing promotions such as they feel they must secure to satisfy their ambitions and to compensate them for the energy and ability they are willing and anxious to put forth.

The result of these developments is that an alarming and dangerous feeling of uncertainty, unrest, irritation and pessimism is spreading among railway officers. It is not shared by all, but it is rapidly extending farther and farther among all classes and all ranks. There are also many employees who are intensely loyal to their officers and if this feeling continues to grow it will permeate extensively among the employees. It was hoped that the advance in wages recently granted would tend to encourage and stimulate employees, but, on the contrary, it is not as much as many expected, and, in consequence, while it has reduced discontent in some quarters, it has actually increased it in others. There are many officers, high and low, who are indignant and pessimistic because they believe that the officers as a class have not been treated considerably or fairly by the Railroad Administration, and while they entertain this belief it is not to be expected that they will exert themselves energetically to quiet the discontent among the employees. Men who feel that they have "troubles of their own" are more likely to think about their own troubles than to try to promote contentment among others.

So far as concerns the officers of the railways the existing situation presents a striking contrast to that which existed twelve months ago. At that time, as now, railway officers had more hard work to do than they ever had. Then, however, they were not merely trying to operate the roads more efficiently than ever before, but they were enthusiastic, optimistic and full of "punch." The railway managers voluntarily had undertaken to work the railways as a single system to demonstrate to the government and public that railway owners, officers and employees in a time of national stress could and would, without any governmental compulsion, submerge their competitive and selfish rivalries and interests and render to the government and public a larger and more efficient transportation service as a means to helping win the war than could possibly be secured under government management. From the optimism which prevailed then to the pessimism which prevails now, from the keenness for achievement which prevailed then to the spirit of hesitation and doubt which prevails now, there has been a long descent for the worse.

The *Railway Age* in thus describing the situation is not indulging in conjecture. It is its business to know, not merely what railway officers are saying, but what they are thinking, and the assertions made here as to their present state of mind are based upon information which has been gathered by intimate conferences with officers in all departments

and of all ranks in all parts of the country. Of course, they do not all regard matters in the same way. They look at the situation from different angles and are subject to different influences. But the general atmosphere of railway officialdom at present is one of dubitation, apprehension and gloom.

This is a condition which the welfare of railway employees and officers of the railways themselves and of the nation ought not and must not be allowed to continue. Men are made efficient or inefficient largely by the influence of fear and of hope. But in all men of spirit and ability the hope of appreciation and of reward is a far more powerful stimulant to efficiency than is fear. Persistent pessimism wins no battles for individuals, organizations or nations.

The present condition of mind of the railway official personnel can be corrected partly by the Railroad Administration and partly by railway officers themselves. The Railroad Administration should make a greater effort than it has to get the point of view of the officers who are out on the lines and actually operating the trains and maintaining the track, structures and equipment. Railway officers of all ranks have been much disturbed about their futures ever since government control was adopted. Their concern was naturally turned into deep apprehension when it was announced that the presidents were to be deposed as the chief executive officers of the roads. The present officers, high and low, have been used to the leadership of these presidents, and directly or indirectly owe their positions to them. Naturally, they have apprehended that the deposition of the presidents would result in radical changes in the official personnel of the roads, and with lightning playing all around them they do not know where it is going to strike.

To those who have closely watched developments under government control, the decision of the Railroad Administration to appoint federal managers of the various lines caused little surprise. When the railroads were first taken over it was generally assumed that the government was going merely to take control of their management and that the actual operation would be left in charge of the companies and their agents. In course of time it has become apparent that the term "government control" is a misnomer and that the government is not merely controlling management but is assuming the function of operation. Now, while men representing the companies could without trouble or embarrassment operate the properties under government control, their position under a system of government operation was sure to become difficult and embarrassing. Government operation having been decided upon it was natural for the Railroad Administration to prefer to put federal managers representing only itself in charge of operation.

In order, however, to get the best possible operating results, while at the same time avoiding having in charge of operation men who owe duties to both the railway corporations and to the government, it seems vitally important that in all cases where it is practicable the presidents of the railways shall be appointed the federal managers, and that where this is not practicable the vice-presidents in charge of operation, if competent men, shall be appointed. This would tend greatly to reduce the general fear now so prevalent that sweeping changes will be made in the official personnel.

Furthermore, it seems extremely desirable that there should be none of the wholesale slashing of salaries of which there has been so much talk and so much apprehension. It would be impracticable to make heavy reductions in the salaries of the higher operating officers without scaling down the salaries of other officers. Now the railway industry is a great industry, and one which demands the best talent that can be obtained. But the best talent will not stay in it and will not enter it unless it is made clear, not merely by words, but by acts, that as great opportunities for carving out successful careers by merit are to be afforded in it as in any other industry.

Fortunately, some late developments indicate that this

is the general policy which probably will be followed by the Railroad Administration. All the regional directors who have been appointed are former railway presidents. All the federal managers who have been appointed, with one exception, have been either the presidents or the operating vice-presidents of the roads of which they have been put in charge. There has as yet been no general cutting of salaries except in the law department. It is a cause of regret from the standpoint of operating efficiency that some of the ablest railway executives of the country are going to stay with the companies, and therefore will not be able in future to direct the operation of the properties, but most of the selections thus far made for regional directors and for federal managers have been good. If the same general policy in making appointments is followed in future, and if the Railroad Administration makes clear, not merely by what it says, but by what it does, that ambitious and able men will be given the same opportunity for careers in the railway business in future that they have had in the past, a large part of the gloom which now hangs over the railway business ought to be dispelled.

Meantime, to a large extent regardless of these matters, railway officers have a duty to perform to themselves, to the railways and to the country. It is indisputable that the lot of many of them has not been recently, and is not now, a happy one. Some of the ablest and most public-spirited railway executives in the country have had their careers suspended, if not actually terminated, by the adoption of government operation. This is a tragedy for them and a misfortune for the country. Those who stay in the service probably will not find their lots as satisfactory under government operation as they have been under private operation. But neither they nor anybody else can afford to forget for a moment that the country is at war, and that war is having unhappy and even disastrous results for many persons. Many young men who had just got well started in their careers have had to leave their offices and business places and go into the army. Men engaged and employed in many essential lines of business are making more money than they ever did, but, on the other hand, many engaged in so-called "non-essential" lines are seeing their businesses drift downward and are confronted with heavy losses, if not ruin. As for the labor situation on the railways, employers in every line of industry are having serious difficulties in dealing with labor. Therefore, as unsatisfactory as the lot of many railway officers is at present, if they will look around them they will find, if that is any consolation, that there are many persons whose situation is fully as disagreeable as their own.

Some railway officers are likely to reply that if they could look forward, as people in other lines of endeavor can, to an improvement in their condition the present situation would be more tolerable, but that government operation probably will lead to government ownership, and that official service on the railways under government ownership would be entirely intolerable to them. That is doubtless true. Few men of ambition and brains would care to stay on the railways under government ownership. But even if government operation were certain to lead to government ownership the duty of railway officers to stay at their posts during the war and do the best work that they can would be plain. Furthermore, it is very far from certain that government operation will lead to government ownership. It seems much more probable now that government operation will prove to be the most effective preventive of government ownership.

Many of the people of this country had come to favor government ownership because they had accepted the view of the advocates of state socialism that government operation of the railways would in some way work a miracle which would result in better service, lower passenger and freight rates, higher wages and large profits for the public treasury. The present trial of government operation, even though it be as successful as human genius and energy can make it, will

demonstrate that there is no magic in government management, and it may and probably will greatly increase rather than diminish the chance of a continuance after the war of private ownership and management of railways.

Railway officers are now going through what probably will prove to be the most trying part of their experience with government operation, because they are right in the midst of the transition from private operation to government operation. When this transition is completed we believe and hope that they will find that they are still serving under very many of the same leaders that they were before, that there have not been as radical changes in personnel and salaries as they fear, and that an increasing amount of consideration for their interests, their rights and their legitimate ambitions will be shown by those in authority. Unless this is done the morale of the railway official staffs will be destroyed and government operation will prove an utter failure. Those in high places in the Railroad Administration undoubtedly are keenly conscious of this; and being conscious of it, they are not likely to act in a manner which in the long run would inevitably defeat every plan and effort they may make to operate the railways efficiently. The future of railway officers as a class, both during and after the war, probably will prove to be far more happy and successful than so many of them now fear.

A New Field for Pork Hunters

THE POSSIBILITIES of the Railroad Administration's revolving fund as a pork barrel have already been scented from afar by many eager citizens and their constituted representatives, some inspired by local pride and interested in local improvements at national expense, and others merely enthusiastic over the possibilities in the way of increased transportation efficiency to be derived from the expenditure of a few millions in places which private capital has not regarded as promising fields for investment.

While there is as yet no indication that the Railroad Administration proposes to allow the large funds at its disposal and under its control to be drawn upon for expenditures in parts of the country where it will do the most good politically instead of from a railroad standpoint, many of the same people who have been active in soliciting and procuring appropriations for their districts have not been slow to perceive the possibilities along that line afforded by the fact that the government is now administering the railroads. Mr. McAdoo's outside office has frequently been thronged with delegations of waterway advocates anxious to point out the immense relief that could be afforded the transportation systems of the country by the improvement of waterways that have been neglected or whose usefulness had been put at a disadvantage by railroad competition and the announcement of the railroad budgets amounting to \$938,000,000 that had been approved by the division of capital expenditures, together with the invitation to the roads to apply to the division of finance and purchases for loans if necessary, has opened up a vista of new opportunities.

Even before the budgets were announced Judge Lovett's office was the recipient of much advice from Senators and Congressmen as to where railroad improvements were imperatively needed. Thus far it has been possible to give such applicants the reply that capital and labor are limited on account of the war and that expenditures must be confined strictly to necessities. As a result the budgets as recently announced were in the form in which they were made up by railroad officers as revised by the regional directors and approved by the division of capital expenditures according to the principles of railroad efficiency and with recognition of the fact that the country is engaged in a war. For example, very few expenditures were approved for new passenger stations or for extensions.

But many members of Congress who hardly knew where the Interstate Commerce building was have been seen in its vicinity of late at the head of large delegations who knew of excellent projects which might be furthered by a government loan to a railroad whose own credit would not stand the strain. Senator Shafroth of Colorado thus appeared with a delegation last week to urge that the government loan \$6,000,000 to the Denver & Salt Lake Railroad for the purpose of building the much bruited tunnel through James Peak which Denver will never be happy without.

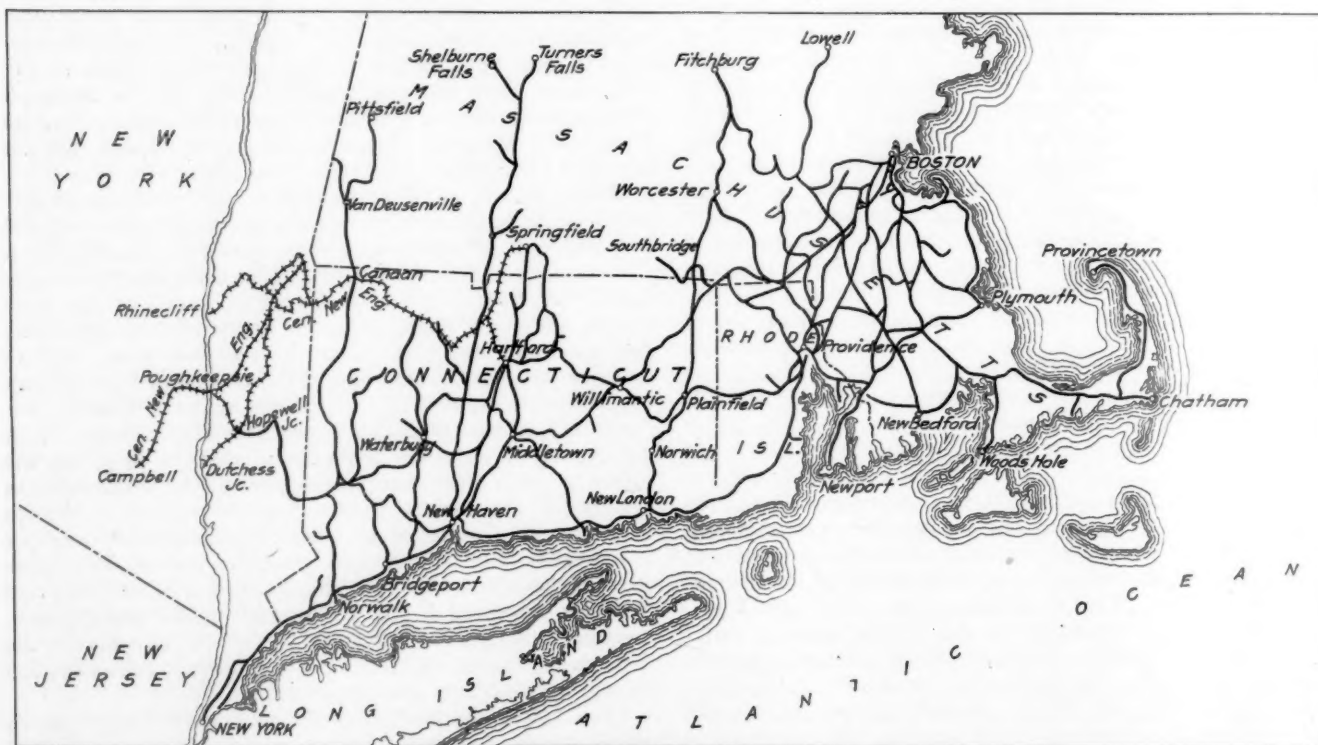
A minor but illuminating illustration of the attempts communities already are beginning to make to secure from the railroads by political influence what cannot be secured by other means is afforded by the case of Delaware, Ohio, a small place a few miles from Cleveland. Formerly the Big Four Railroad operated some shops there. The Journal-Herald, a local newspaper, records that "the Delaware shops have been practically extinct for seven years." The railroad has made them so for reasons of transportation efficiency. "When the government took over the railroads of the country 13 freight trains were passing through Delaware daily eastbound and 10 westbound," says the Delaware Journal-Herald. "All these trains are now going over the Bellefontaine route." In order to get the operation of the practically abandoned shops renewed and the freight trains run through Delaware again—for the sake of Delaware, of course, and not of railroad efficiency—the Chamber of Commerce of that town has appealed to Congressman William A. Ashbrook, of the district in which Delaware is located, and

similar matters through Congress. The method of approach to a congressional appropriation is well-known but Congress now has very little to say about running the railroads and the Railroad Administration organization consists mainly of practical railroad officers and not of the type of men usually found in government offices. It is easy to get appropriations through Congress because members who have no interest in them vote for them on a reciprocity basis so that a similar courtesy will be shown as to projects in which they are interested.

Moreover it is much easier to turn down raids on the pork barrel during war times than during times of peace.

New York, New Haven & Hartford

THE RISE IN MARKET PRICE of the stock of the New York, New Haven & Hartford within the past two months has led to the calling of the stock among brokerage house customers, the "mystery stock." While it is true that, under the government guarantee of railroad net income, the New Haven will receive an amount that would not presumably justify it in immediately beginning payment of dividends on its stock, it is, nevertheless, far from a mystery as to the improvement that has taken place in the affairs of the company. During 1917, there was a big improvement in operating conditions; there was a steady progress in carrying out a plan for much needed betterments; there was marked progress in untangling the complicated intercorporate relations of the New Haven



The New York, New Haven & Hartford

to United States Senator Pomerene. The Journal-Herald says that Congressman Ashbrook "gladly offered to look into the matter in the interest of Delawareans," and that Senator Pomerene "was heartily in favor of taking up the cause of Delawareans." What is national railroad efficiency from a political point of view compared with the local interests of Denver, Colo., and Delaware, Ohio?

Applicants for money for projects of this kind now have a more difficult task to perform than when trying to get

and its subsidiaries and controlled companies; and, since the close of the calendar year 1917, the floating debt situation has been cleared up by the government buying at par the \$43,964,000 one year 6 per cent notes, the proceeds of which paid off the greater part of the \$45,000,000 notes which were issued April 16, 1917, and due April 15, 1918. The New Haven's floating debt is now taken care of till April 15, 1920, through a provision which permits of the renewal of the notes taken by the government for a second year. Total

operating revenues in 1917 amounted to \$85,785,000; an increase over 1916 of \$5,353,000. Of this increase \$3,343,000 was in passenger revenue. Total operating expenses amounted to \$61,970,000; an increase of \$7,598,000 and of this increase \$5,161,000 was in transportation expenses. This was an increase of 14 per cent in transportation expenses, but it would appear that the entire amount represented increased rates of wages and per unit costs of fuel and material and that actually the company expended less units of work in moving a 13 per cent greater freight business and an 11 per cent greater passenger business than in 1916.

The ton mileage moved in 1917 was 2,776,000,000; an increase over 1916 of 208,000,000 ton miles. The total number of passengers carried one mile in 1917 was 1,814,000,000; an increase over 1916 of 164,000,000 passenger miles. The mileage of revenue freight trains decreased by 817,000 and the average revenue freight train load was 397 tons in 1917; an increase of 71 tons over 1916. With an increase of nearly 11 per cent in passenger revenues, there was a decrease of over 3 per cent in passenger train mileage. These results were obtained without any increase in the number of locomotives in freight or passenger service. As a matter of fact, 55 locomotives were scrapped or sold and only one added.

Since the end of 1917 the New Haven has begun to receive some of its heavy Santa Fe type freight locomotives which have been ordered for more than a year. Preparatory to putting in service these heavier locomotives, the company during 1917 carried out a quite extensive program of additions and betterments.

There was \$1,072,000 spent for new and improved bridges; \$1,017,000 for additional yard facilities; \$626,000 for improved locomotive facilities; and \$571,000 for additional yard passing sidings. The total, chargeable to capital account, for additions and betterments, exclusive of equipment, was \$5,473,000. There was \$621,000 spent for new equipment and improvements to equipment; and payments on equipment trusts amounted to \$966,000. The greater part of the income which should result from the additions and betterments to roadway and track will not be shown before the figures for 1918 are made up. Some of the expenditures for equipment, however, were immediately productive. For instance, the company spent \$146,000 for superheaters and additional safety appliances. The expenditures on superheaters added during the year 131,000 pounds to the tractive power of the locomotives in service. As already mentioned, 55 locomotives were scrapped; but the addition to tractive power through the installation of superheaters was alone equal to the tractive power of nine of the locomotives disposed of.

President Pearson, in his annual report, gives credit for the improvement in freight train loading, car loading, and number of passengers per passenger train mile, to the public as well as to his organization, and the public did unquestionably co-operate with the management, especially as regards car loading, and it put up with the inconveniences in the way of passenger service because of a better understanding of the New Haven's problems. The board of directors, in a resolution which was ordered printed in the annual report, give full credit to Howard Elliott, who resigned as president on May 1, 1917, for the greatly improved public relations of the company. There could be no doubt of the importance of Mr. Elliott's services in this respect. The removal of the obstacles in the way of permanent financing by the action of the Massachusetts, Rhode Island and Connecticut railroad commissions and legislatures may safely be assumed to have been due in good part to Mr. Elliott's efforts. Making full allowance, however, for this and certain other favorable circumstances, there still remains a large measure of the total progress made which must be credited

to the aggressive businesslike methods of the new management. Neither the increase of 70 tons in average train loading nor the increase of 12 per cent in average revenue lading per loaded car could have been accomplished without a determined and well directed effort on the part of officers and employees of the railroad company. Further evidence of better operation is given by the fact that the amount spent for hire of equipment was \$676,000 less in 1917 than in 1916; the total in 1917 being \$2,671,000.

The operation of the New York, New Haven & Hartford has often been likened to the operation of a vast freight and passenger yard. It is pretty generally recognized that one of the most important features in the economical operation of a large yard is to have ample yard facilities. The New Haven has suffered severely, especially in the last three years, from the lack of yard facilities, engine house facilities and passing tracks. With so large a part of its business passenger business and so large a part of its freight business fast freight, the main tracks have been subject to severe congestion. One important object in ordering the heavy Santa Fe freight locomotives which are now beginning to be put in operation was to obtain a much heavier train load without reducing the average speed of freight trains to any harmful extent. There have been differences of opinion as to how effective this experiment will prove, but the past year has demonstrated that even without these locomotives it has been possible to inspire the organization so as to produce greatly improved results in moving more tonnage with less freight train mileage.

Mention has already been made of the temporary clearing up of the floating debt situation. The government has approved of \$24,316,000 for additions and betterments to the New Haven, eliminating only \$4,248,000 of the sums which the company asked approval of for this purpose.

At the end of the year, the company had \$4,495,000 cash and had written off through profit and loss during the year \$6,276,000 loss in the liquidation of the New England Navigation Company, \$1,163,000 loss in the liquidation of the Millbrook Company, \$3,000,000 loss in the surrender of the New England Steamship Company, and \$328,000 on loss in the sale of securities. The profit and loss surplus now stands at \$3,429,000. It is rather interesting to note that settlement was made with E. H. McHenry by the payment as recommended by a board of arbitration of \$100,000; and with Charles S. Mellen, former president, by the payment of \$95,000.

The time for the sale of the stock of the Boston & Maine, which is held by the Boston Railroad Holding Company and controlled by the New Haven, has now been extended to February 1, 1919.

Throughout the report there is a businesslike facing of facts, even when they are unpleasant, and a record of progress being made especially in better operation which should be good reading to holders of New York, New Haven & Hartford securities.

The following table shows the principal figures for operation in 1917 as compared with 1916:

	1917	1916
Average mile operated.....	1,995	1,995
Freight revenue	\$40,395,999	\$38,727,425
Passenger revenue	34,427,801	31,085,035
Total operating revenue.....	85,784,893	80,432,167
Maintenance of way and structures.....	9,019,344	8,977,055
Maintenance of equipment.....	12,191,352	10,693,992
Traffic expenses	522,287	505,332
Transportation expenses	36,380,373	31,218,961
General expenses	2,470,695	1,975,363
Total operating expenses.....	61,970,060	54,372,029
Taxes	3,336,980	3,005,254
Operating income	20,471,857	23,049,037
Gross income	27,741,717	30,346,639
Net income	2,404,095	5,554,977

Letters to the Editor

More on the Short Line Problem

ST. PAUL, Minn.

TO THE EDITOR:

Since the power given to the President by the act of March 21, 1918, to relinquish of his own volition control of railroads that are not needful or desirable, must be exercised before July 1, 1918, the director general necessarily has had to make rapid decisions and to act promptly in the matter of the relinquishment of the short line railroads, control of which he does not wish to retain, and he will have to continue to act quickly during this month, if he is to make use of that power. On the other hand the President has power to take into federal control any needful or desirable railroad, and therefore can take a relinquished road again.

If it should be clear that the President would not retake control of a large number of the short line railroads, control of which was relinquished, are they to be left to shift for themselves? Is there, or can there be no middle ground between federal control and abandonment of responsibility and assistance to the United States? Should there not be some further method devised for the handling of the short line railroads not under federal control, in a uniform manner, affiliated with the controlled railroads and supervised and assisted by the United States Railroad Administration. There seem to be fears on the part of some of the owners of these roads that in the midst of handling the more dominating problems of the larger railroads, the short lines may be overlooked or given scant consideration. It may be admitted that these fears are groundless; nevertheless too much stress cannot be laid on the fact that their disposition and operation is a serious question for many persons and communities, particularly in the West, and therefore, one of the most important problems presently to be solved by the United States Railroad Administration. It is therefore important to study the short line problem.

The Railroad Administration has one of the greatest problems ever laid on one man or set of men in managing and directing the transportation system of the country, and naturally would not wish to be hampered with the care of roads that need continual nursing and special attention in order to be kept in operation. There are many roads whose financial problems would not be solved by being kept in federal control (though other difficulties above adverted to would be avoided) because the just compensation as defined, calculated and allowed under the terms of the act of March 21, 1918, would not be sufficient to pay their charges and war taxes; and yet no conditions of war operation, receivership or recent expenditure, not fully reflected in operating railway income of the prescribed period, exist to warrant the President to make a special agreement. Some other means must be found.

It is not a sufficient answer to say that it is not the business of the United States to protect private investments, for though this might have been said before federal control had been taken of the railroad systems of the United States, a new element has been introduced in the fact that the Railroad Administration by its control over routings can make or break any railroad that is outside of federal control. Yet though this is persuasive of an obligation on the part of the United States to make some arrangements for the protection of the short line railroads, it is by no means conclusive. The great national purpose is to win the war, and to that end everything else must be subordinated and, if necessary,

sacrificed. The decisive question is whether a railroad is needful or desirable in a comprehensive national system of transportation; but there are many viewpoints to be considered in reaching a conclusion on the question of need or desirability.

The case of the railroad which handles a large quantity of essential commodities is simple. But it is unlikely that such a road would have very serious financial difficulties in any case. This would also be true of the plant facility.

There is a larger question than whether a community produces sufficient essential commodities to make it immediately necessary that a railroad be maintained. If, without fulfilling this condition, a community is a growing one, entirely dependent for its transportation on the short line railroad, or if large numbers of people who work in other communities on essential commodities live on the line of such short line railroad and are entirely dependent on it for transportation, then it would seem to be desirable that such a railroad should be insured of future existence. The development of new communities, and the protection of the normal conditions of life for the people is an important function of the government in the war emergency. Developing communities must be encouraged if the future of the country is to be made secure, and it would be no ultimate economy to save money by abandoning a railroad if the equivalent, or more, were lost by making people, dependent on that railroad, move to other communities.

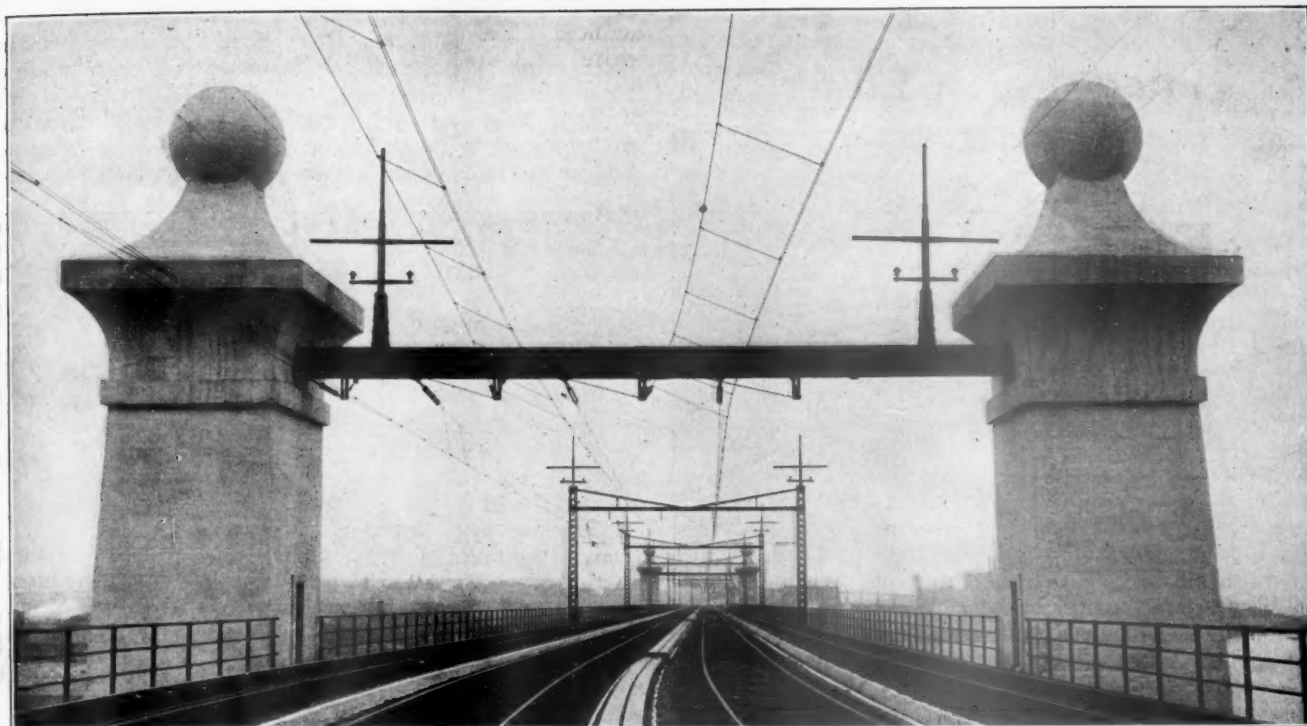
Reduced to lowest terms, it would seem that the only railroad that can be left to its fate is the railroad which ought never to have been built, and which might better now be scrapped.

The owners of the short lines naturally recognize that the control of routings is the power of the Railroad Administration which affects them most, and they urge particularly that if left out of federal control an arrangement be made whereby routings in their favor will be observed. Such an arrangement would seem to be entirely impracticable, for it would destroy one of the most valuable gains resulting from unified control of railroads, namely, the ability to ship over the shortest and most direct line and the elimination of traffic solicitation. But, on the other points some uniform arrangement and some federal assistance ought to be given.

It would seem that the government should make agreements with the short lines which are not kept within federal control, (a) to assist the short line in financing itself during the period of the war, the budget of operating expenses and financial requirements of the short line to be subject to governmental approval and control; (b) that the government should allow to the short line railroad the same percentage of division of rates that it had prior to the beginning of federal control; (c) that the government should insure its pro rata share of car supply; (d) that the government should permit it to make all of its purchases through the regional purchasing committee and that it be given the benefit of prices fixed or obtained by the government; and (e) that it be given the right to call upon the United States Employment Service for labor and stand upon the same plane as other railroads.

This would probably require additional legislation; but there is no essential objection to that. The government is in a new and uncharted field, and it cannot be expected that the first plan and the first law passed in pursuance thereof, however wise the framers, will cover every possible phase of so widespread and intricate a problem as taking from private ownership and control and placing in federal control the vast railroad transportation system of this country.

SANFORD H. E. FREUND,
Assistant General Counsel, Great Northern.



Electrification of New York Connecting Railroad

Link Between the Pennsylvania and the New Haven Eliminates
Eleven and Thirteen Mile Car Ferry Routes

THE NEW YORK CONNECTING RAILROAD, constructed and owned jointly by the Pennsylvania Railroad Company and the New York, New Haven & Hartford Railroad Company, forms an important connecting link in the heart of greater New York City between the existing railroad lines of these two companies. It is used both for freight and passenger service, separate tracks being provided for each. The connection with the New Haven Railroad is at Port Morris and the connection with the Pennsylvania Railroad for passenger service is at Sunnyside Yard in Long Island City, from which point through trains are operated into the Pennsylvania Station, New York, via the Pennsylvania tunnels under the East River. The two-track freight line extends from the New Haven connection at Port Morris to Fresh Pond Junction, thence over the Long Island Railroad to Bay Ridge, from which point a short car ferry (about three miles long) completes the connection with the Pennsylvania Railroad Company's main freight terminal at Greenville, N. J., on New York Bay. The New York Connecting Railroad with its connections with other railroads is shown in Fig. 1.

The principal New York Connecting Railroad data are as follows:

Length of two-track passenger line, Port Morris to Sunnyside Yard, miles	5
Length of two-track freight line, Port Morris to Fresh Pond Junction, miles	8
Length of two-track freight line, Port Morris to Bay Ridge, miles	20
Maximum grade westbound, approaching Hell Gate bridge, two miles, per cent.	1.2
Maximum grade eastbound, approaching Hell Gate bridge, 1.7 miles, per cent.	.72
Length of four-track passenger and freight section, Port Morris to Sunnyside Junction, miles	3.8
Length of Hell Gate bridge between abutments, ft.	977
Length of Hell Gate bridge outside of towers, ft.	1,150
Cleared height of bridge above mean high water, ft.	135
Cost of Hell Gate bridge	\$4,000,000
Cost of the New York Connecting Railroad	30,000,000
Total cost of line, including the Bay Ridge improvement	40,000,000

Method of Operation

Formerly, the interchange of a few passenger trains between the Pennsylvania and the New Haven Systems was by a car ferry route of about 11 miles from Jersey City to Harlem River and the freight interchange was by a still longer ferry, about 13 miles, between Greenville and Oak Point. As these float services were conducted by the New Haven, the New York Connecting which takes their place is operated entirely by the New Haven.

For satisfactory operation in connection with the New Haven Railroad's electric passenger service between New York and New Haven it was decided to electrify the passenger tracks of the New York Connecting Railroad so that through trains may be operated into the Pennsylvania Station, New York, without changing engines. This electrification has been carried out by the single-phase, overhead catenary trolley system of the same operating characteristics at that employed on the New Haven, the current delivered being at 11,000 volts and 25 cycles. The New Haven passenger locomotives used in this service are of the A.C.-D.C. type and are, therefore, capable of operating through the East River tunnels, which are equipped with third rail into the Pennsylvania Station, the change from overhead to third rail operation being effected at the east end of Sunnyside Yard. Power for operating the trains on the New York Connecting Railroad is supplied direct to the trolleys from the New Haven System at Port Morris without auxiliary transmission or feed wires as these are not necessary for the present passenger service.

Trolley Supporting Structures

Two general types of structures are used for supporting the overhead catenary trolley. Where the track is located on

the ordinary type of right-of-way tubular pole structures (either with cross-catenary supporting spans or with brackets) similar in design to those used for the Pennsylvania Railroad electrification at Philadelphia have been adopted;

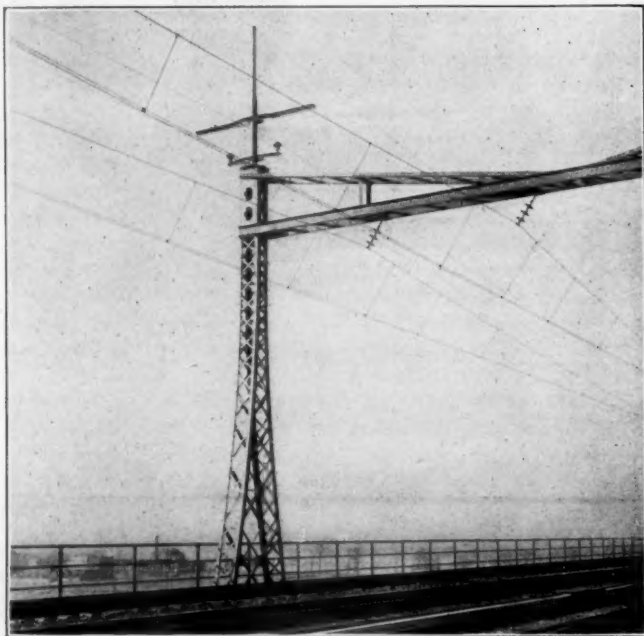


Fig. 2. Type of Post Used to Span Bridge Expansion Joints

on the bridges and viaducts it is not feasible to use this type of construction and here substantial structural steel bridges are employed.

On the steel viaduct either side of Hell Gate, the bridges

sary to separate these brackets in order to provide for expansion and obtain satisfactory widths of bearing. The bolts on one side of each post fit into slotted holes to allow for movements due to temperature changes. Because of this width of base, posts with curved members were used on the trolley bridges as shown in Fig. 2. The cross-beams on these bridges are built up of double channels laced together and



Fig. 3. Trolleys Are Supported on Hell Gate Bridge by Attaching the Cross Wires to the Steel Members of the Bridge

reinforced at the center by sag braces. A special bridge which is similar in design to the other structures except that the truss is considerably deeper is used to carry signals.

Within Hell Gate Bridge the trolleys are supported by cross-wires attached to the steel members of the bridge, making a very light, inconspicuous system not detracting from the appearance of the bridge, as is shown in Fig. 3. At either end of Little Hell Gate Bridge ornamental reinforced concrete bridge towers are used to support a cross-beam for carrying the trolleys. One of these beams is also used as a safety anchor for the trolleys. This is shown in first illustration.

On Bronx Kill Bridge, Fig. 4, the trolley insulators are attached directly to overhead steel members with safety anchors at each end. At Port Morris on the north end where the tracks approach the junction with New Haven the trolleys are supported on single track structural brackets part of which also support certain of the New Haven trolleys of the line to Harlem River. These may be seen in the background of Fig. 5, the structure in the foreground being of special design for the transition between the two types. On the southern approach where the railroad is carried on fill between concrete retaining walls for about 3,000 feet, the trolley structures rest on the retaining walls and are

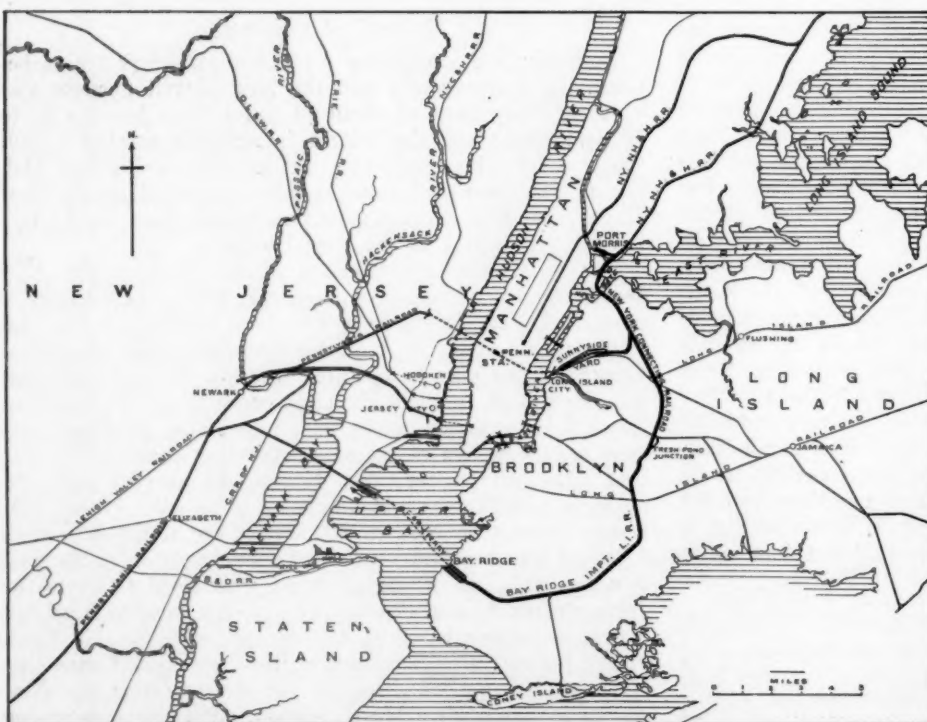


Fig. 1. Map of New York Connecting Railroad

are supported on heavy double brackets riveted directly to the girders underneath the track. As most of these supports are at expansion joints between the deck girders, it was neces-

similar to those on the steel viaduct, except that the sides of the posts are parallel instead of being curved.

Between this retaining wall section and Sunnyside Junc-

tion which is the head of the four-track railroad where the passenger tracks leave the freight line for the connection at Sunnyside Yard, there are several trolley supports consisting of guyed tubular poles with cross-catenary wires to support the trolley, as shown in Fig. 6. Between Sunnyside Junction and Woodside avenue on the passenger line, trolley supports are of the two-track guyed tubular bracket type and beyond Woodside avenue they are single track tubular



Fig. 4. On Bronx Kill Bridge, the Trolley Insulators Are Attached Directly to Overhead Steel Members

brackets without guys. This type of construction is shown in Fig. 7.

Catenary Trolley System

As the New York Connecting Railroad is to be maintained and operated by the New Haven Railroad, details of hardware that have become standard on the New Haven System have been followed closely. The trolleys have been erected over the passenger tracks throughout their length, and over

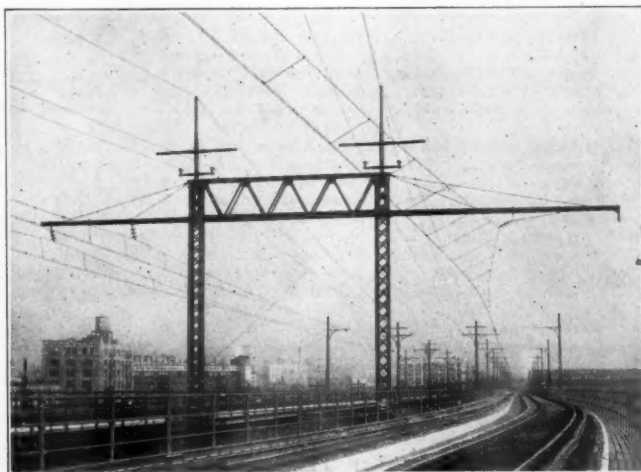


Fig. 5. Transition Structure Used Between Two Different Types of Trolley Construction

the westbound freight track from Port Morris to the top of the grade at Hell Gate Bridge to permit electric pushers to be used to help the freight trains up the grade.

The trolley system consists of a 9/16 in., 7-strand, extra high strength galvanized steel catenary messenger supporting with hangers a 2/0 B. & S. gage grooved copper auxiliary messenger and 3/0 B. & S. gage grooved high strength bronze

trolley wire. The hangers consist of 1/2 in. galvanized iron rods screwed into a clamp that engages the messenger at the upper end. On tangents the hangers screw into a clamp at the lower end that is attached to the copper auxiliary messenger. On curves the lower end of the hanger is used as a bolt to hold a clamp which engages both the auxiliary messenger and the contact trolley. The spacing of the hangers on tangents is approximately 30 ft. with two bolted clamps between each pair of hangers attaching the contact trolley to the auxiliary messenger. On curves the hangers are placed about 15 ft. apart. A typical view of the trolley supports and the trolleys on a curve is shown in Fig. 8.

The trolley is insulated from the structures by three 10 in. free swinging porcelain discs, similar to those used in the yards of the New Haven Railroad. An insulator arrangement of this kind has the advantage of economy, insulation, ample strength and, most important of all, provides insurance against interruption to service due to the failure of any one insulator unit. In anchoring and sectionalizing the catenary system three 6 ft. wood strain insulators have been used in multiple with an equalizing yoke.

At each trolley bridge on tangents there is a steady to prevent excessive swinging of the trolley during high winds. These steadies are insulated from the structures by strings of three porcelain insulators similar to those used to support



Fig. 6. Guyed Tubular Poles with Cross-Catenary Wires to Support the Trolley Are Used Where the Passenger Tracks Leave the Freight Line

the trolley. The trolleys are insulated from each other by single 6 ft. wood strain insulators. No steadies or pull-offs are used on curves, the system floating naturally into an inclined position. The height of the contact trolley above the top of rail on and between Bronx Kill and Hell Gate bridges is 18 ft. because of overhead structural clearances within the bridges. Either side of these points the trolley rises to a normal height of 22 ft. above the rail.

Transmission Lines

The four-track structural trolley bridges are fixed on each side with tubular bonnet poles cemented into the structural posts. Cross arms are provided to carry four high voltage wires on the upper arm and two on the lower arm. At present there are no wires on the upper arms, as the extent of the present electrification does not require trolley feed wires. The lower arms each carry 2/0 B. & S. gage power wires for the signal system. These are mounted on a New Haven standard insulator for 11,000 volts, although the initial voltage is only 2,200. In case of failure on one side the current will be automatically thrown to the circuit on the other side.

On the passenger connection between Sunnyside Junction and Sunnyside Yard the signals are fed by a single 2,200

volt rubber-insulated cable, which is carried on a $\frac{1}{2}$ in. Siemens-Martin steel cable outside of the one- and two-track bracket structures. A switch at Sunnyside Junction automatically throws this cable onto the power circuit that is energized. On these structures a cross-arm is provided for four future trolley feeders.

A $\frac{1}{2}$ in. galvanized Siemens-Martin ground wire has been run on top of the bonnet poles on both sides of the four-track bridges and on the top of the single post structures.

At each signal bridge on the viaduct circuits have been run between the signals and relay boxes which are on top of the concrete piers and against the steel girders. Access has been provided to the relay box by means of ladders and platforms.

The rails used on the New York Connecting Railroad are the Pennsylvania Railroad standard 125-lb. steel rail. Each joint is bonded with two No. 1/0 duplex pin terminal bonds, similar to those used on the New Haven Railroad, except that the thickness of web in the extra heavy rail required a slightly longer terminal.

Communication Lines

For the purpose of railroad communication a telephone and telegraph conduit line has been built connecting with the Pennsylvania Railroad at Sunnyside Yard, and the New Haven Railroad at East 132d street between Harlem River and Port Morris, with connections into the railroad towers and to frequent telephones on the railroad.

On the viaduct the conduit line consists of six fibre ducts

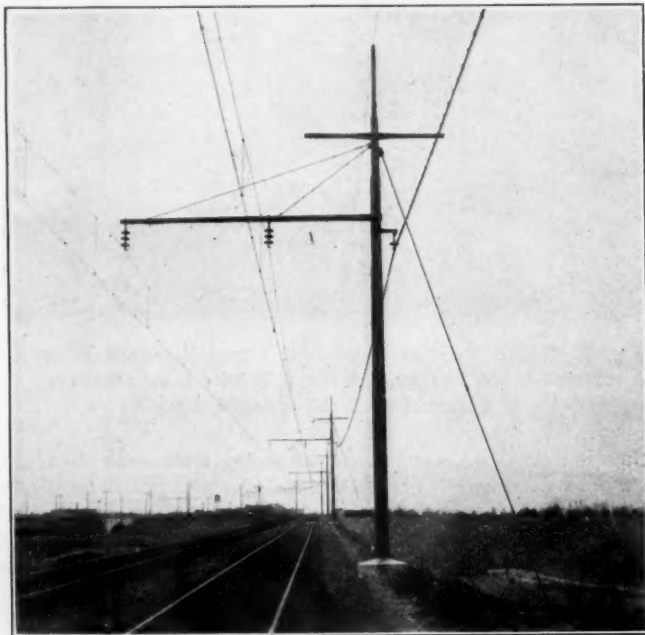


Fig. 7. Guyed Tubular Bracket Type Poles Are Used for Single and Double Track Construction

protected by heavily reinforced concrete and provided with steel splicing chambers. In the fill south of the viaduct a six-way underground conduit line has been constructed of vitrified clay duct encased in concrete. The standard manhole is a pre-cast oval reinforced concrete type with concrete covers. Rectangular concrete manholes cast in place have been used at special locations and in a short 12-duct section west of Woodside avenue. Concrete test houses are provided on the passenger section at East 132d street, Sunnyside Junction and at Woodside avenue, where the telephone cables are terminated for testing and for lateral circuits.

A 45-pair cable has been installed along the passenger

section. This cable is lead-covered and consists of 12 pairs No. 13 B. & S. gage copper wire quaded, and 32 pairs No. 16 B. & S. gage copper wire quaded, and one lead encased test pair. The test house at East 132d street is connected with the Harlem River Station by an aerial cable. In the steel splicing chambers on the viaduct the telephone cable has been offset to allow for expansion and contraction of the steel girder, which amounts to about three-quarters of an inch. On Hell Gate and Little Hell Gate bridges, however, the maximum expansion in the bridge system will be about 10 in. and here the cable has been terminated with potheads and flexible rubber insulated cables used for connection between the potheads. South of Sunnyside Junction a similar cable has been run along the freight line to Bay Ridge, most

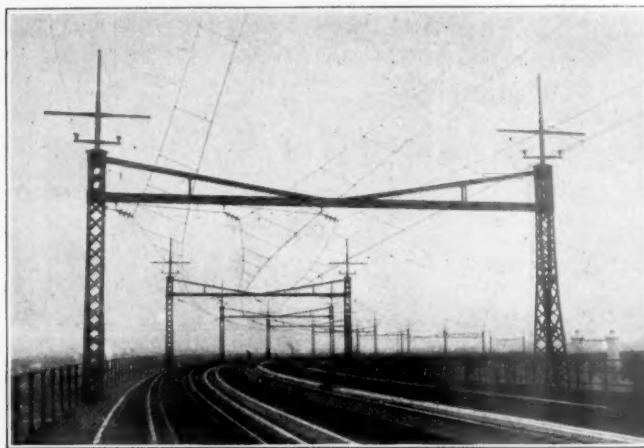


Fig. 8. Typical Trolley Construction for Use on Curves

of the way being carried overhead. The poles used are southern pine impregnated with creosote by the vacuum process. This cable line connects with the Long Island Railroad System at their East New York Substation, a new 24-pair cable connecting with Jamaica.

The principal materials were furnished by the following manufacturers:

Structural bridges	Virginia Bridge & Iron Company.
Tubular poles	National Tube Company.
Steel messenger and ground wire.....	American Steel & Wire Company.
Copper auxiliary messenger.....	John A. Roebling's Sons Company.
Copper alloy contact trolley....	Bridgeport Brass Company, Standard Underground Cable Company.
Copper signal transmission wire.....	John A. Roebling's Sons Company.
Bonds	American Steel & Wire Company.
Insulators	Ohio Brass Company.
Guy rods	American Iron & Steel Mfg. Company.
Steel castings	Atlantic Steel Castings Company.
Malleable iron castings.....	Malleable Iron Fittings Company.
Catenary hangers and castings.....	Westinghouse Elec. & Mfg. Company.
Special bolts, nuts, rods, etc.....	American Iron & Steel Mfg. Company, Thomas Laughlin Company, Greenlie-Halliday Company.
Turnbuckles and sockets.....	Thomas Laughlin Company.
Signal power cable.....	The Okonite Company.
Vitrified clay duct.....	Shawmut Manufacturing Company.
Communication cable and eqpt.....	Western Electric Company.
Pre-cast concrete manholes and test houses	C. F. Massey Company.

THE BRITISH BOARD OF TRADE is given further powers for the restriction of railway passenger traffic by additions to the Defense of the Realm Regulations. Authority is now given for prescribing the conditions on which tickets may be issued and passengers carried, either generally or in specified localities, or for journeys exceeding specified distances, and for enabling priority to be given on railways to any passengers or classes of passengers, and for enabling railway companies to refuse to carry passengers, and to refuse access to stations or trains in order to give priority to other passengers, and to remove passengers obtaining such access without authority.

Doings of the United States Railroad Administration

First Appointments of Federal Managers Announced— Administration Meets Shop Labor Troubles

WASHINGTON, D. C.

THE APPOINTMENTS already announced of federal managers to operate the railroads for the government instead of for their companies undoubtedly give some indication of the policy to be followed in the selection of the others, whose names are expected to be given out shortly. Five appointments have already been announced and in at least four of the cases the men selected are those who would naturally have been expected to be picked out. In two cases the new federal managers have been presidents, and in three cases they have been operating vice-presidents. Mr. Stevens, who has been appointed federal manager of that

Western, might have been appointed federal manager of his road, but he was made regional director and, therefore, required to give up his direct connection with his own road. In the case of the Pennsylvania and the Baltimore & Ohio the presidents have practically occupied the position of chairman of the board and as their systems are located in two regions, and therefore will have two federal managers, the appointment of either as federal manager would have been a distinct demotion.

The appointments already announced show that the integrity of many railroad systems is to be considerably dis-



Elisha Lee
Federal Manager, Pennsylvania Lines
East



A. W. Thompson
Federal Manager, Baltimore & Ohio
Lines East



G. W. Stevens
Federal Manager, Chesapeake & Ohio



J. H. Young
Federal Manager of the Virginian.



A. C. Needles
Federal Manager, Norfolk & Western

part of the Chesapeake & Ohio that lies within the Pocahontas region, has been president of his road in charge of its operation, while the company had a chairman in New York. In the case of the Virginian, Mr. Young, the operating president of another road, was appointed in place of a president who had his office in Wall Street. Mr. Needles, the operating vice-president of the Norfolk & Western, was chosen as its federal manager and a similar policy was followed in the case of the Baltimore & Ohio and the Pennsylvania, where Mr. Thompson and Mr. Lee were appointed in charge of the lines included in the Allegheny region.

Undoubtedly Mr. Maher, president of the Norfolk &

turbed by the creation of the new regions because their lines extend beyond the regional boundaries. This is the case with the Baltimore & Ohio and the Pennsylvania, part of whose lines are in the Eastern region and part in the Allegheny region, and the Chesapeake & Ohio also has lines in both the Eastern and Pocahontas Regions. Some smaller lines are also added to the jurisdiction of the federal manager for the Norfolk & Western. As a result, the jurisdiction of a federal manager, as it is apparently the intention that they shall report to only one regional director, in a great many instances will not correspond to the jurisdiction of the former railroad organizations. A similar result will

probably be seen when announcement is made of a further decentralization of the Western region.

The selection of federal managers, in addition to the few that have been announced, has been under consideration by the regional directors who met with Director General McAdoo at White Sulphur Springs on Wednesday of this week to go over the entire subject with him, so that the appointments may be announced this week.

George W. Stevens

George W. Stevens, federal manager of the Chesapeake & Ohio, with headquarters at Richmond, Va., was born on June 29, 1851, at Utica, Ohio, and began railway work February 1, 1864. He served successively as office messenger, agent's clerk and operator on the Baltimore & Ohio until February 1, 1870; then as agent, despatcher's assistant and train despatcher on the Pittsburgh, Cincinnati & St. Louis. From 1873 to 1890 he was in the service of the Wabash, St. Louis & Pacific and its successors as follows: Eight years train despatcher, two years superintendent Ohio & Indiana division, 3½ years superintendent Eastern division; from January 1887 to 1890, assistant general superintendent; on January 1, 1890, he was appointed general superintendent of the Chesapeake & Ohio, and then to February 1900 he was general manager. Since February 1, 1900, he served as president of the same road, also since March 1910 as president of the Hocking Valley and since July 1910 as president of the Chesapeake & Ohio of Indiana.

Elisha Lee

Elisha Lee, who has been appointed federal manager of the Pennsylvania Railroad, Lines East of Pittsburgh and Erie, with headquarters at Philadelphia, Pa., was born September 24, 1870, at Chicago, and was graduated from the Massachusetts Institute of Technology in the class of 1892. He entered the service of the Pennsylvania Railroad in November of the same year as a rodman in the office of the division engineer, Tyrone division. From August, 1895, to October, 1897, he was on leave of absence. In April 1899, he was appointed assistant supervisor, and two years later was promoted to supervisor. In August, 1903, he was appointed assistant engineer in the maintenance of way department and in April, 1907, was promoted to principal assistant engineer on the Philadelphia, Baltimore & Washington. On March 24, 1909, he was appointed superintendent of the New York, Philadelphia & Norfolk, and two years later was promoted to assistant to the general manager of the Pennsylvania Railroad Lines East of Pittsburgh and Erie. In April, 1914, he was appointed general superintendent of the Philadelphia, Baltimore & Washington with office at Wilmington, Del., remaining in that position until May, 1916, when he was appointed assistant general manager of the Pennsylvania Railroad, with headquarters at Philadelphia; since April 1, 1917, he has served as general manager. Mr. Lee served also as chairman of the Conference Committee of managers of the eastern railroads of the United States from 1912 to 1914. In that position he had charge, on behalf of the various railroads interested, of the negotiations with the trainmen's brotherhoods, and of the presentation of the railroads' case in the arbitration of employees' demands for increased pay. In 1915 he became chairman of the National Conference Committee of Railroads, representing practically all the railroads in the United States in the controversy with the trainmen.

A. W. Thompson

A. W. Thompson who has been appointed federal manager of the Baltimore & Ohio lines east, with headquarters at Baltimore, Md., was born on May 8, 1875, at Erie, Pa., and was graduated from Allegheny College, Meadville, in

1897, as a civil engineer. The following year he began railway work in the engineering department of the Pittsburgh & Lake Erie, and in 1899 was appointed assistant engineer of surveys on the Pittsburgh division of the Baltimore & Ohio. He was made assistant engineer of the Pittsburgh division in 1900, and the following year was appointed engineer of the Cumberland division. In 1902 he returned to Pittsburgh as division engineer, and the following year went back to the Cumberland division as superintendent. He was transferred to Wheeling, W. Va., in 1904 as superintendent of the Wheeling division, and from 1907 to April, 1910, he was chief engineer maintenance of way. In April, 1910, he was promoted to chief engineer of the Baltimore & Ohio system including the Baltimore & Ohio Southwestern, and remained in that position until December, 1910, when he was made general manager with office at Baltimore, Md., and since April 11, 1912, he has been vice-president.

Arthur C. Needles

Arthur C. Needles, who has been appointed federal manager of the Norfolk & Western, was born on January 10, 1867, at Baltimore, Md. He was educated in the public schools and at Swarthmore College, Pennsylvania. He began railway work in 1882, as a rodman on the Washington, Ohio & Southern, and in 1883, became a rodman in the engineering department of Norfolk & Western, and was then yard clerk and brakeman on the same road. In 1884 he was made night and day yardmaster, and from April, 1887, to August, 1890, he was yardmaster first at Pulaski, Va., and then at Bluefield, W. Va. On August 1, 1890, he was appointed assistant trainmaster and on December 25, 1898, was made trainmaster of the Radford division. He was then for one month assistant superintendent of the Pocahontas division, and in June, 1901, was promoted to superintendent of the Shenandoah division. The following year he was transferred to the Norfolk division. From December, 1902, to February, 1904, he was superintendent of the Pocahontas division and was then promoted to general superintendent. In December, 1912, he was appointed general manager and subsequently became vice-president with headquarters at Roanoke, Va., of the same road.

Joseph H. Young

Joseph H. Young, who has been appointed federal manager of the Virginian Railway, was born January 17, 1864, at Salt Lake City, Utah, and was educated at the University of Utah. He began railway work in 1882, with the Utah Central as office boy and warehouseman, and was later agent and operator at various stations, and then bill clerk on the same road. He was with the Union Pacific as ticket clerk and train agent at Ogden, Utah, from 1883 to 1886, and was superintendent of the Utah division of the same road from 1891 to 1902. From 1886 to 1889 he was traveling passenger agent of the Chicago & North Western, and then to 1891 was general agent of the Salt Lake & Eastern, and general superintendent of the Utah Central. Mr. Young was general superintendent of the Rio Grande Western, now part of the Denver & Rio Grande, at Salt Lake City, for two years from 1902, and then became general superintendent and later general manager of the Colorado & Southern at Denver. For a short time during 1907, he was general superintendent of the St. Louis & San Francisco. He was general superintendent of the Southern Pacific at San Francisco from 1907 to 1910, and in the latter year was elected president of the Alaska Steamship Company, the Northwestern Steamship Company, Ltd., the Northwestern Commercial Company, the Northwestern Fisheries Company, and the North Coast Lighterage Company, and vice-president of the Copper River & Northwestern. From May, 1912, to January, 1914, he was president of the Spokane,

Portland and Seattle, the Oregon Trunk Railway, the Oregon Electric Railway, the United Railways, the Spokane & Inland Empire, the Pacific & Eastern, and the Dalles, Portland & Astoria Navigation Company, with office at Portland, Ore. In May, 1914, he was elected president of the Norfolk Southern, which position he now leaves to become federal manager of the Virginian Railway as above noted.

Railroad Administration Has Labor Troubles

The Government does not propose to tolerate strikes as a method of securing wage increases and those who attempt to employ that method were characterized in effect as friends of the Kaiser in a telegram addressed by Director General McAdoo to the officers of the various organizations of railway shop employees on May 30 as his comment on the action of shop employees of the Southern Railway at Alexandria, Va., who went out on strike on May 28 as a protest because the increase in wages awarded them in the director general's wage order was smaller than they considered satisfactory.

Mr. McAdoo's telegram, reminding the shopmen that

report of the Railroad Wage Commission and he had ordered a minimum of 55 cents an hour for such employees, but general dissatisfaction with the rates was expressed throughout the Southeast, where the wages had recently been fixed by arbitration on an eight-hour basis, as well as from other parts of the country.

The first manifestation of the complaint in the form of a strike was at the Alexandria shops, where between 300 and 400 men stayed away from their work on May 28. The strike apparently was not authorized by the organizations and on the following day, after conferences between the men and J. F. Anderson, acting president of the International Association of Machinists, with E. C. Sasser, superintendent of motive power of the Southern, they agreed to return to work. It was also reported that strikes were contemplated on other roads but the assurance that the board would soon meet to take up the matter induced the men to remain at work.

Director General McAdoo's telegram, sent to the executives of the various shop craft unions, was as follows:

"The strike of certain shopmen, machinists, etc., in the



The Regional Districts

they are now government employees and declaring that any complaints as to the wage decision should be referred to the new Board of Wages and Working Conditions was also intended as a general reply to many protests which have been sent to the Railroad Administration that the increases ordered represent little or no advance in the case of many classes of employees who had already received from the railroads enough to approximate or exceed the new scales. A large proportion of these protests came from representatives of the shop employees and others whose wages as fixed in the order were less than the same men could receive by leaving their railroad work for munitions plants or other government contract work where the wages are high. The complaints were referred to W. S. Carter, director of the division of labor, who telegraphed replies saying that the new wage board had been created to adjust such conditions. Special consideration to the case of the shop employees had been given by Director General McAdoo in revising the

railroad shops at Alexandria, Va., has created a very painful impression on the public mind. I cannot believe that these men knew what they were doing. They are all employees now of the United States Government. They are not employees of any railroad corporation, therefore, this was a strike against the Government of the United States. It is the first time in the history of our Government that any of its employees have attempted a strike against their Government. Such action is incredible. For the good of our beloved country and for the honor of railroad men in the service everywhere, I hope that there will be no repetition of what every one must condemn as unpatriotic in the highest degree.

"The Government cannot, of course, be coerced or intimidated by any of its employees. It is anxious to do justice to all, and will do justice to all as far as it is possible to measure justice. Recognizing that there are probable inequalities in the recommendations of the Wage Commission

which should be impartially considered and dealt with, I appointed in my General Order No. 27, dated May 25, a Board of Railroad Wages and Working Conditions, composed of three representatives of labor and three representative railroad men, whose duty it is to hear and to pass upon all petitions and complaints. Every class of employees or parts of classes of employees who feel that they have just ground for complaint under the wage decision should submit their cases promptly to this board, and they will be given just and impartial consideration. The American people have just been called upon to pay largely increased freight and passenger rates for the purpose of paying in part the increased wages, amounting to more than \$300,000,000 awarded to railroad employees.

"Suppose they should strike against the Government because they do not think they are fairly treated in being forced to pay these increases for the benefit of railroad labor, what would happen to our country? Suppose the railroad officers should strike because they disliked the orders of the government, and should refuse to obey them, what would happen to them? Suppose that railroad employees should strike against the decisions of their government and hamper the operation of the railroads at a time when transportation is essential to protect the hundreds of thousands of American boys now fighting on the battlefields of Europe to save the lives and property and liberty of railroad employees serving here at home, what would happen to our country?"

"The Kaiser probably would get it. We cannot all get exactly what we want in this world, nor can we win this war unless each and every citizen is willing to submit to the laws of the land and to the decisions of those in authority.

"We railroad men particularly must give unswerving and loyal support to our government, no matter what our individual views and disappointments may be, relying upon a fair hearing of our complaints and the justice of our cause, and accepting patriotically the final decisions of those in authority who under our laws are charged with the responsibility of making them.

"While in the German drive now going on the sons of railroad men and the sons of Americans of every class are dying on the battlefields of France to save America and democracy in the world, shall there be found among us any set of men who are unwilling to sacrifice something of their personal views and individual desires to support America's heroes, who are making the supreme sacrifice for us?"

"I earnestly hope that from one end of this great land to the other it may never be said again that any railroad man, officer, or employee was so unpatriotic as to strike against his own government when it is in the midst of the most perilous war of all history. It is the highest duty of patriotic men to remain at their posts with the railroads, where they are so urgently needed for the safety of the country, and to rely upon the Board of Railroad Wages and Working Conditions and the director general for the just consideration of their claims.

"I am sure that I can count upon you to immediately urge upon your men by wire the wisdom and patriotism of the course I have suggested."

When, in spite of this appeal, word was received that the employees of the Silvis shops of the Chicago, Rock Island & Pacific had gone on strike, demanding an increase to 75 cents an hour, J. A. Franklin, assistant to the director of the division of labor, was despatched to the scene to investigate the situation.

The Board of Wages and Working Conditions, created in the director general's wage order, held its first meeting at Washington on Saturday, June 1, and organized by electing G. H. Sines, vice-president of the Brotherhood of Railroad Trainmen, as chairman, and F. F. Gaines, formerly superintendent of motive power of the Central of Georgia, as vice-chairman. The other members are J. J.

Dermody, vice-president of the Order of Railroad Telegraphers; A. O. Wharten, president of the railway employees' department of the American Federation of Labor; C. E. Lindsey, formerly division engineer of the New York Central; and W. E. Morse, formerly general manager of the Denver & Salt Lake.

Representatives of the shop craft unions appeared at a hearing before the Board of Wages and Working Conditions on Monday and urged that the wage scale ordered by Director General McAdoo be not put into effect until it is revised, saying that great dissatisfaction would be created, and that it might be impossible to avoid many strikes. They pronounced the proposed scale as applied to the shop employees to be inequitable, saying that it would nullify all the reforms that have been worked out in their wage scales since 1915, because the proposed increases are based on the wages of December 31, 1915, whereas since then there has been a considerable readjustment in wages as the result of arbitration. In place of the new scale proposed, they asked for the rates which they had originally asked at the hearing before the Railroad Wage Commission, which included an eight-hour standard day, six days a week, time and a half for overtime, 75 cents an hour for most classes of employees, and 56¼ cents an hour for car men of less than four years' experience. They urged speedy action to revise the scale in order to prevent an exodus of employees to shipyards and munitions plants, and based their claims for higher pay principally on the comparison with the wages and conditions in the shipyards. The shop employees were represented by J. F. Anderson of the International Association of Machinists, G. C. Van Dorens of the Brotherhood of Blacksmiths and Helpers, Otto E. Hoard of the Amalgamated Sheet Metal Workers, John J. Purcell of the Brotherhood of Electrical Workers, J. S. Wilds of the Brotherhood of Railway Car Men, and D. M. Jewell of the Brotherhood of Boilermakers and Iron Shipbuilders and Helpers. They claimed to represent directly 250,000 men and approximately 500,000 men, including the employees not members of the organizations. G. H. Sines, chairman of the board, explained that Director General McAdoo is anxious to see justice done for all classes of railroad employees.

I. C. C. Authorizes Special Supplements

The Interstate Commerce Commission, which is given authority in the railroad control act to review the increased rates ordered by the director general, is issuing the necessary orders to enable the director general to comply with the law in the filing of the tariffs which are to go into effect on June 10 and June 25. In his statement announcing the proposed increases issued on May 25, which was published on May 27, Mr. McAdoo said that in making the rates effective a simple form of tariff authorized by the Interstate Commerce Commission must be used and that this would lead to the temporary disregard, to some extent, of established groupings and differentials. A few days later the commission gave out copies of special permission orders, No. 45,950 and No. 45,951, "for the use of common carriers under federal control," modifying the provisions of its tariff circular rules to permit the carriers to file special supplements to their freight and passenger and baggage tariffs, respectively, in abbreviated form in order that they may begin to secure the advantage of the increased revenues on the scheduled dates. The form of the special supplements is prescribed in the orders. A similar procedure was followed in the 15 per cent rate case last year in order to expedite the proceedings.

Special Permission No. 45,950, which applies to freight tariffs, is as follows:

"Whereas, The President of the United States through the director general, United States Railroad Administration, has initiated and prescribed freight rates to be applied on all freight traffic carried by railroad and steamship lines

under federal control, except the traffic carried entirely by water to and from foreign countries, as set forth in General Order No. 28, dated May 25, 1918, of said director general;

"And Whereas, The director general, United States Railroad Administration, has requested such modification of the tariff rules of the commission as will permit said carriers under federal control to file special supplements to freight tariffs in abbreviated form and to permit filing with this commission by such carriers freight tariffs and effective supplements which have not been heretofore filed, thereby enabling carriers under federal control, in the present emergency, to secure in an economical and expeditious manner increased revenues to be derived from increases in freight rates initiated and prescribed, in said General Order No. 28, of May 25, 1918; and

"It appearing, That the commission's rules and regulations, Tariff Circular 18-A, in section (i) of Rule 4 require an explicit statement of the rates, in cents or in dollars and cents, per 100 lb., per barrel or other package, per ton or per car, together with the name or designation of the places from and to which they apply; in section (e) of Rule 9 limit the number of, and the volume of effective supplements to any tariff and forbid supplements to tariffs issued in loose-leaf form; in section (k) of Rule 9 prohibit a change in any rate sought to be increased by a rate which is under suspension by order of the commission; and in section (a) of Rule 54 provide that rates filed must be allowed to go into effect, and cannot be changed for at least 30 days after the date when the rates have become effective;

"It is ordered, That the provisions of Tariff Circular 18-A in Rules 4 (i), 9 (e), 9 (k), and 54 (a), be, and they are hereby, temporarily waived in the particulars hereinafter set forth, but not otherwise, as to, and confined to, special supplements filed under authority hereof by common carriers under federal control; *Provided*, That there shall not be in effect at any time more than one such special supplement to the same tariff; and

"It is further ordered, That said carriers under federal control be, and they are hereby, permitted to file special supplements to freight tariffs to provide for cancellations, minimum weights, minimum charges, and increases in rates and charges by the percentages or amounts set forth in said general order of the director general; and such special supplements shall be in form as follows."

The special supplement form includes a table of increased rates which is made effective by the following: "Effective June 25, 1918, all rates then in effect named in tariffs enumerated herein and in prior supplements thereto, as indicated, to each of which tariffs this is a special supplement, are increased to the rates shown in column B in table of rates on pages — to — inclusive, hereof. If a prior supplement thereto contains rates to become effective upon a later date as indicated thereon, such rates will, on such later effective date, be increased to the rates shown in Column B in the table of rates." It is also stated that the supplement does not increase charges for terminal or transit services or facilities, switching, weighing, demurrage, car service, transfer, diversion, reconsignment, refrigeration, icing, storage, elevation or other special services. Other rules regarding the application of the rates are given.

The special permission as to passenger fares and baggage charges is similar in form and modifies the rules which require an explicit statement of the fares in cents or in dollars and cents, together with the name of the places from and to which they apply, which limit the number of supplements, which prohibit a change in any fare sought to be increased by a fare which is under suspension by order of the commission and which provide for 30 days' filing of tariffs. It is provided that the increased fares

may be stated by the use of any of the three following plans, viz:

By a mileage table of fares when the distances are published in the tariff which is to be supplemented.

By a table, where the fares in tariff as amended are specifically named, providing that the increased fares will be as named in the special supplement.

By the publication of specific fares, in cents or in dollars and cents, from and to specified points, and to provide that fares from and to other important points will be made by use of extension basis, also to omit temporarily the unimportant points.

The rate tables prescribed for the special supplement are to show that where the mileage or rate published in tariff or effective supplement is as shown in Column 1 the fare in coaches will be as shown in Column 2, the fare in standard sleeping or parlor cars will be as shown in Column 3 and the fares in tourist sleeping cars will be as shown in Column 4. Additional details are prescribed as to constructing fares on a mileage basis and other tariff features.

Protests Against Increased Rates

A flood of protests against the new rates ordered by the director general in General Order No. 28 has poured in upon the Railroad Administration by letters, telegrams and personal calls. While there are many complaints because of the size of the increase, which came as somewhat of a surprise to those who have listened to predictions in the past that the government could raise wages and reduce rates at the same time, the bulk of the protests were directed to the disturbance in rate relationships which will result from the plan of putting the increases into effect and readjusting them afterwards. Some of the complaints came from state railroad commissions, some of whose rates are said to be increased two and three fold.

The director general on May 31 announced the appointment by the regional directors of traffic committees to deal in their respective territories with all questions as to freight rates arising under General Order No. 28. These included the following committees whose appointment has heretofore been announced as succeeding the various traffic associations and rate committees to deal with general rate matters:

Eastern Freight Traffic Committee.—B. Campbell, chairman, 143 Liberty street, New York City, for Official Classification territory.
Southern Freight Traffic Committee.—Randall Clifton, chairman, Walton building, Atlanta, Ga., for Southern Classification territory.
Western Freight Traffic Committee.—A. C. Johnson, chairman, Transportation building, Chicago, for Western Classification territory.

The following district freight traffic committees have also been appointed:

New England District Freight Committee.—H. L. Kentfield, chairman, South Station, Boston, Mass.
Trunk Line District Freight Committee.—H. C. Burnett, chairman, 143 Liberty street, New York City, N. Y.
Trunk Line District Coal and Coke Committee.—E. B. Crosley, chairman, Reading Terminal, Philadelphia, Pa.
Central District Freight Committee.—C. J. Brister, chairman, Transportation building, Chicago, Ill.
Central District Coal and Coke Committee.—J. C. Venning, chairman, 804 Penna. Station, Pittsburgh, Pa.
Chicago District Freight Traffic Committee.—F. P. Eymann, chairman, Transportation building, Chicago, Ill.
St. Louis District Freight Traffic Committee.—J. L. West, chairman, Century building, St. Louis, Mo.
St. Paul District Freight Traffic Committee.—H. M. Pearce, chairman, St. Paul, Minn.
Kansas City District Freight Traffic Committee.—D. R. Lincoln, chairman, Kansas City, Mo.
Portland District Freight Traffic Committee.—F. W. Robinson, chairman, Portland, Ore.
San Francisco District Freight Traffic Committee.—W. G. Barnwell, chairman, San Francisco, Cal.

The announcement says:

"The director general invites the co-operation of the shipping public in working out a satisfactory adjustment of freight rates on the higher level now necessary. All shippers who desire to make suggestions as to the maintenance of

established differentials, or the re-adjustment of freight rates under General Order No. 28, may present their views through the freight traffic officers of the railroads serving them; but if shippers feel, after presenting such matters to their home roads, that they want their views given further consideration, the freight committee for the territory or district involved will be glad to hear and consider any proposal or suggestion the shippers have to offer."

Under an administrative order all protests were referred to the division of public service and accounting but after a conference it was decided to refer them to the local freight committees. All telegraphic inquiries were answered but the letters received were so numerous that early in the week it had not been possible to give replies to them. Clifford Thorne's protest arrived in advance of the issuance of the order, based on newspaper predictions as to the amount of the proposed increase. It was in the form of a memorial addressed to the director general, signed by representatives of western and central western live stock and petroleum and grain shippers' associations which, he said, have a combined membership of over a million.

The memorial pronounced the proposed increase a travesty on justice and attempted to remind the director general that the increase does not mean just one payment of the estimated billion dollars, but a billion dollars annually, "equivalent to more than 6 per cent on the par value of all railroad securities outstanding." It is stated that an advance of 20 per cent in passenger fares and 5 per cent in freight rates would take care of the largest estimate on the proposed wage increase and that the shippers should not be expected to pay all the increased expenses of the railroads resulting from the war. Mr. Thorne also points out that the director general has surrounded himself with a staff composed exclusively, with a few rare exceptions, of former railroad officials, who would be unconsciously biased by the general desire of the railroads to have rates on a high level in case they are returned to private management or even in case government ownership should follow, because the net income at the time might be a factor in determining the purchase price. These circumstances, he said, render it imperative that the recommendations made by the director general's staff should not be followed until the shippers have been heard from. It is declared to be impossible to state at the present time what economies may be effected by the unification of the railroads under government control and the falling off of net income for one or a few months is said to be of little significance. It is declared that the guaranty to the railroads, based on their net income for the past three years, is a war measure and should be borne by the people as a whole rather than by the shippers, who are denied any protection from the increased costs in their business.

Mr. Thorne had previously wired to the commission for a hearing on the subject of oil rates, but the commission had to inform him that it could do nothing in advance of a formal complaint after the effective date of the tariffs. Mr. Thorne was given an appointment with Director Prouty on June 4 to talk over the matter.

A meeting of representatives of the state railroad commissions consisting of the executive committee and the special war service committee of the National Association of Railroad and Public Utilities Commissioners, was held at Washington on June 4 and 5 at the call of C. E. Elmquist, Washington representative of the association. The meeting was also attended by some of the Interstate Commerce Commission members who were formerly state commissioners. Mr. Elmquist had written a letter to Mr. McAdoo on May 16, requesting a consultation with the state commissioners before rates were increased and expressing the opinion that under the federal control act the President cannot initiate intrastate rates except in accordance with the laws of the several states. He, therefore, suggested not only that the state com-

missions be consulted about the proposed increase and the effect it would have upon the public and the revenues of the carriers in the several states, but also that the director general comply with the local laws by filing intrastate tariffs. He also asked for an opportunity to examine the proposed tariffs or any memoranda outlining the proposed increase in advance, as the representative of the state commissions. Mr. McAdoo did not answer the letter, but on May 27, after announcement of the proposed increase, sent a telegram to the state commissions expressing the hope that they would understand the necessity for the increase and regretting that he had not been able to consult with them beforehand.

The new rates will bear rather heavily upon the iron and steel industry and manufacturers of these products, many of whom have government contracts on a lump sum basis, so that their profits will be greatly reduced unless an allowance is made for the increased rates. The railroads in Central Freight Association territory had already initiated an increase in iron and steel rates from a commodity to a class rate basis, before the general order was issued, by filing with the Interstate Commerce Commission applications for permission to file tariffs.

Most of the protests against the higher passenger fares come from state commissions and users of mileage books, who must turn in their unexpired mileage on June 10 for exchange. It has been announced that unexpired commutation tickets will be honored until they are used up and will not be cancelled on June 10.

It has been reported that the electric interurban railways would also file applications with the state commissions and the Interstate Commerce Commission for increases in their fares to 3 cents a mile and that the Pullman Company would propose a minimum of \$2 for overnight rates in sleeping cars in place of \$1.50.

It has been announced that round trip excursion passenger rates to the Pacific Coast will be made this year on a basis 20 per cent higher than last year's rates. This rate was allowed for the convention of the Associated Advertising Clubs at San Francisco in July.

The Interstate Commerce Commission has issued special permission order No. 47,060 prescribing a form of tariff supplement to be used in putting into effect the order of the director general that officers, enlisted men, and nurses of the Army, Navy and Marine Corps, when traveling at their own expense, shall be allowed to purchase tickets at one-third of the regular rates.

The commission has also issued a supplemental order modifying its outstanding orders fixing rates for the future to permit the rates and fares ordered by the director general to be made effective.

Canadian railways have also filed applications with the Interstate Commerce Commission for authority to advance rates on their traffic within the United States to the level of the new rates ordered by Director General McAdoo.

Commerce Counsel for the Railroad Administration

R. Walton Moore, of Washington, D. C., who as commerce counsel for the Southeastern railroads has been a prominent figure in rate litigation before the Interstate Commerce Commission and who represented the southeastern lines in the fifteen per cent case, has been taken over as a member of the staff of the Railroad Administration as assistant general counsel in charge of matters before the Interstate Commerce Commission. In this position Mr. Moore will have charge of representing the administration in the proceedings to ensue before the commission in connection with the large number of protests and the readjustment of the rates to preserve existing relationship as far as possible. Frank W. Gwathmey, who has been associated with Mr. Moore, has also become connected with the legal department of the Railroad Administration.

Four Express Companies to Be Consolidated

One Company to Be Agent for Railroad Administration Under
Private Management But Will Share Profits

THE FOUR PRINCIPAL express companies operating in the United States, the Adams Express Company, the American Express Company, Wells Fargo & Company, and the Southern Express Company, are to be combined into a new company, effective on July 1, to be known probably as the American Railroad Express Company, which will be given virtually a monopoly of the express business by a contract with the United States Railroad Administration for the carrying on of the express business for all the railroads under federal control.

This plan, which has been worked out after several weeks

per cent of the gross earnings. This percentage was arrived at by taking the average for ten years of the payments by the express companies to the railroads.

Out of the balance of the revenues the express company will pay operating expenses and taxes and, if earned, a dividend of 5 per cent on the capital stock. If more than 5 per cent is available for distribution, out of the next 2 per cent the express company will receive 1 per cent and the government 1 per cent; out of the next 3 per cent available for distribution the express company will receive 1 per cent and the government 2 per cent; any further amounts available for distribution will be divided one-quarter to the express company and three-quarters to the government.

An important feature of the arrangement is that the new company will be capitalized only to the extent of actual property and cash put into the business and it was stipulated by the government that this should not exceed \$40,000,000. The actual amount determined upon is \$35,000,000, including that issued to the old companies in proportion to the physical properties to the amount of \$30,000,000



B. D. Caldwell,
Chairman of the Board

of negotiations between the representatives of the express companies and the division of public service and accounting of the Railroad Administration, has been sanctioned by the director general in place of the plan earlier proposed, which it is understood was advocated by the express companies, for placing the express companies under government operation in the manner adopted for the railroads.

Under this arrangement there will be no government guarantee of earnings but the express company will be a private corporation acting as the director general's agent for carrying on the express business. The character of the service and the character of the rates will be under the director general's control and subject to initiation by him and the government will share in any profits above 5 per cent on the capital stock.

Whereas the express companies now have contracts with the railroad companies by which they pay to the latter a fixed percentage of their gross earnings, usually about 50 per cent, for "express privileges," they will now have but one contract with the government and the director general will receive 50



George C. Taylor,
President

and \$5,000,000 issued at par for cash to represent working capital.

One of the points which received considerable discussion during the negotiations was as to whether railroad employees should continue to act as agents for the express company as station agents now do, receiving as compensation a percentage commission on the business handled. Under the plan decided upon, while the new express company is permitted, upon arranging therefor with the director general, to use railroad employees, in express service,

the entire compensation of all such employees, both for railroad and express services, will be fixed and paid by the director general and the express company will compensate the director general for services rendered by such employees to the express company. The Railroad Administration, which was represented chiefly in the negotiations by Luther M. Walter, assistant to the director of public service and accounting, objected to a plan which would give opportunity for competition between railroad and express in the person of the agent, who might be interested in diverting shipments to the express if he were to receive a commission on such business.

The new arrangement will make it possible to avoid a great deal of wasteful duplication of facilities and to eliminate a large amount of accounting with the individual railroads, which while necessary under the old system of separate contracts between the express companies and the various railroad companies will be unnecessary under the new system.

The offices of the competing companies will be consolidated or otherwise readjusted to the new conditions and new routes will be opened.

The government should receive as its proportion of the express earnings, on the basis of last year's business about \$100,000,000 a year in revenue. An application of the express companies for a 10 per cent increase in rates is still pending before the Interstate Commerce Commission.

A statement announcing the plan issued by the director general says: "The director general is greatly pleased to inaugurate this salutary method of division of profits. The express company is given a continuing inducement to accomplish the greatest efficiency and economy, and yet the government will enjoy an increasingly great proportion of the benefits of all such efficiency and economy."

Officers

George C. Taylor, president of the American Express Company, is to be president of the new company. B. D. Caldwell, president of Wells Fargo & Co., is to be chairman of the board. William M. Barrett, president of the Adams Express Company, will be a director and member of the executive committee. The following have been selected as operating vice-presidents:

R. E. M. Cowie, now vice president and general manager of the American Express Company, will have charge of the Atlantic Departments.

E. A. Stedman, now vice president and general manager of Wells Fargo & Co., Chicago, Central Departments.

C. D. Summy, general manager of the American Express Company at Chicago, in charge of Southwestern Departments.

A. Christesen, vice president and general manager of Wells Fargo & Co., San Francisco, in charge of Pacific Departments.

E. M. Williams, vice president in charge of traffic for the Adams Express Company, in charge of Southeastern Departments.

F. M. Holbrook, vice president in charge of traffic of Wells Fargo & Co., New York, will be located at Washington as assistant to the president.

D. S. Elliott, vice president in charge of traffic of the American Express Company, New York, will be in charge of traffic for the new company.

J. W. Newlean, vice president and controller for Wells Fargo & Co., Chicago, will be the vice president in charge of accounting for the new company.

E. E. Bush has been selected as manager of maintenance and purchases.

T. B. Harrison and C. W. Stockton, now general attorneys for the American and Wells Fargo & Co., respectively, will act as general counsel.

President Taylor's Statement

President Taylor issued a statement regarding the new arrangement as follows:

"Hereafter the express companies will eliminate the individual identity which has separated them for the last three-quarters of a century and offer to the government and to their joint patrons a unified, single express service. In the future merchants, manufacturers, and individuals need merely specify 'by express' and the entire man power and vehicle power of the express world will respond to their call.

"At no time in the history of the railroads has the volume of express traffic been so great as it is today, the business reaching a total during the last fiscal year of over \$200,000,000.

"Already the vast terminals now maintained by the various companies are being unified for a practical saving of time and transfer.

"The new move will bring into one organization over 100,000 men now trained in express service. It will be the policy of the company to maintain a broad gage attitude toward its employees, many of whom have spent their lives in the service and thousands of whom have made great personal sacrifices in carrying the immense burden of the last three and a half years.

"In the past the express companies have been vital factors in the conveyance of merchandise and foodstuffs. They have eliminated distance and the time element between the manufacturer and his market. The move is designed to improve the distribution of commerce and agriculture and the business of the country may look upon it with confidence that their interests will be carefully and intelligently served."

The non-transportation activities of the separate companies, such as money orders, travelers' checks, travel department, and foreign exchange will not come under the consolidation, but will be conducted by the individual companies as in the past, the officers of the new company acting as agents for the old companies in the handling of these features.

Mr. Taylor also said: "The policy of the new express company will be that of close co-operation with all patrons and the public in general, in an effort to give better service in every way. The fact that competition disappears will in no way be taken advantage of in our attitude toward the public. The merchant bodies and shippers with whom I have been so fortunate to come in contact during the past 25 years of service with the American, as well as the officers and employees, will, I am sure, attest to the policy of courtesy, fair treatment and prompt action in all dealings with them and this same policy will be rigidly followed with the new company. The task of joining together all the lines and facilities of the several companies and the providing of new and necessary equipment will take time but it will be accomplished as rapidly as possible. The new company will settle up the unadjusted matters, such as claims and others items, of the old companies so as to give to the public the least possible delay or annoyance.

"The new company will take over the pension plans of the old companies and a new pension plan will be worked out at once for application in the future. Plans are already under way for scaling up of wages of many employees, toward more uniformity in the various classes, first consideration being given to those in the service drawing the lower rates of pay.

"New through car routes will be established to do away with rehandling and to better utilize railroad facilities, all going toward greater efficiency and better service. With but one express company, any officer of which will afford a contact with all express matters, no confusion will exist and the public will be saved many delays and annoyances which have obtained in the past. Considering the interest of the

Officers of the New Express Company



J. W. Newlean
Vice-President in Charge of Accounting



E. A. Stedman
Vice President in Charge of Central
Departments



C. D. Summy
Vice-President in Charge of South-
western Departments



F. S. Holbrook
Assistant to the President



D. S. Elliott
Vice-President in Charge of Traffic



R. E. M. Cowie
Vice-President in Charge of
Eastern Departments.



E. M. Williams
Vice-President in Charge of
Southern Departments



C. W. Stockton
General Counsel



T. B. Harrison
General Counsel



E. E. Bush
Manager of Maintenance and Purchases

government and the co-relation of the express companies with the United States Railroad Administration, we are sure the public will soon realize that the change is in the right direction."

Burns D. Caldwell

Burns Durbin Caldwell, chairman of the board of the consolidated express company, was born at Placerville, El Dorado county, Cal., on April 27, 1858. He was graduated from high school, at Chambersburg, Pa., in 1873, at the age of fifteen, and the same year began railway work as a clerk in the auditor's office of the Vandalia Railroad, at Terre Haute, Ind. He was rapidly promoted and in 1881 became chief clerk in the general passenger and ticket department of the Vandalia at St. Louis, Mo., remaining in that position for about four years. In 1885 he was appointed chief clerk in the general passenger and ticket department of the Missouri Pacific and the St. Louis, Iron Mountain & Southern at St. Louis and in 1888 was appointed assistant general passenger agent of these lines. In June, 1892, he was chosen chairman of the Western Passenger Association, with headquarters at Chicago. This position he filled until July, 1899, when he went to the Delaware, Lackawanna & Western as traffic manager and later he became vice-president of the same road.

In 1911, he resigned to become president of Wells, Fargo & Co., with headquarters at New York. Mr. Caldwell is a director of a number of railway companies and is also president of the Harlem Transportation Company.

George C. Taylor

George C. Taylor, the new president of the consolidated express company, has had a meteoric career. Not yet 50 years of age, he entered the service of the American Express Company at Ripon, Wis., in 1885, as a wagon helper. While attending Ripon college in the same city he was employed at night on a short express run between Ripon and Winneconne, and in that manner paid his way through school. In the next few years he filled practically every position in the office service of the company, such as transfer clerk, trace clerk, money clerk, cashier and agent at various points throughout the western states. He was subsequently chief clerk to the superintendent of express service on the Great Northern and then route agent on the same railroad and on the Missouri, Kansas & Texas, the Illinois Central and the Yazoo & Mississippi Valley when American Express service was inaugurated on those lines in 1892 and 1893. He was then appointed assistant superintendent of the southern division of the American Express Company, with headquarters at St. Louis, following which he went to Chicago as general agent. From Chicago he went to Cleveland, Ohio, as assistant general manager of the Central division, and from there was transferred two months later to the newly created Pacific division, with headquarters at Salt Lake City, with the title of manager. On July 1, 1911, he returned to Chicago as general manager of the western department in charge of all the company's lines west of Buffalo, N. Y. In February of the following year he was also elected vice-president. Hardly more than two years later, on June 16, 1914, he was elected president of the American Express Company with headquarters at New York, to succeed James C. Fargo.

Mr. Taylor makes friends easily and has an exceptionally large acquaintance among the employees of the American Express Company. He does not believe it necessary for an executive to hold aloof from his subordinates, but on the contrary mixes with all on terms of sympathetic comradeship. Furthermore, he possesses the faculty of maintaining the best of discipline in his organization and, at the same time, of winning the respect and loyalty of all who are associated with him in his undertakings. He always gives heed to the counsel of others, and, in fact, encourages all

employees from the lowest to the highest to submit suggestions calculated to improve express service. While he appreciates the advice of others, he needs no assistance in making decisions. After giving thorough consideration to a matter he decides quickly and subsequent experience generally confirms the soundness of his judgment. Naturally frank and devoid of guile, he is equally outspoken in criticism and commendation. In a word, he is a natural executive and organizer. Perhaps no incident better illustrates his initiative than his prompt action on behalf of American tourists in the central empires at the opening of the European war. The precipitate inception of the great conflict had demoralized international credit to such an extent that travelers' checks were not honored except when the issuing company had deposits to cover them in the countries of our present enemies. Accordingly, Mr. Taylor lost no time in sending several million dollars in gold to Germany, with the result that all travelers' checks drawn on the American Express Company were cashed in full. Mr. Taylor is a native of Ripon, Wis., where he was born Oct. 21, 1868.

Robert E. M. Cowie

Robert E. M. Cowie, vice-president of the Eastern departments of the new company, with headquarters in New York, entered the service of the American Express Company October 2, 1883, as an office boy or junior clerk in the office of R. B. Poore, then superintendent of the Ohio division at Cleveland, Ohio. On June 1, 1886, he was promoted to the position of secretary to the general superintendent of the Southwestern division at Cleveland, Ohio, and on June 23, 1890, he was transferred to Chicago as secretary to General Manager Antisdell. Later, upon the advancement of Mr. Antisdell to the position of vice-president and general manager, Mr. Cowie became assistant vice-president and general manager. In November, 1906, he was appointed assistant general manager of the Western department. On January 25, 1910, he was appointed manager of the Central department at Cleveland, Ohio, and the following July he was transferred as manager of the Pacific department at Salt Lake City, Utah, the headquarters later being changed to Denver, Colo., and Los Angeles, Cal., respectively. In January, 1915, he went to New York as vice-president and general manager in charge of the Eastern lines.

E. A. Stedman

E. A. Stedman, vice-president of the Central department of the new company, with headquarters at Chicago, entered the service of the American Express Company in June, 1878, as a clerk and cashier and served at various places in Iowa. In June, 1882, he went to Wells, Fargo & Co. as money clerk at Denver and the next year he was appointed agent at the Union Pacific transfer depot at Council Bluffs. In 1884 he became route agent at Bismarck, N. D. The following year he was assigned to the position of route agent with headquarters at Emporia, Kan., and in 1886 he served as cashier at Kansas City.

Mr. Stedman was appointed assistant superintendent at Chicago, in charge of the Illinois division, in 1887, when Wells Fargo service was first extended east of Missouri. He was made superintendent of the New York division, with headquarters at Binghamton, N. Y., in 1888, when Wells, Fargo & Co. inaugurated its service east over the Erie Railroad and two years later his headquarters were transferred to Jersey City. On January 1, 1892, Mr. Stedman was made general agent at New York and seven years later he was appointed assistant manager of the Atlantic department and on January 1, 1902, assumed the duties of acting manager. The following October he was made manager of the same department. Mr. Stedman became general manager of the company on September 1, 1906, and was appointed vice-president and general manager at New

York in August, 1908. He became vice-president and general manager at Chicago on August 1, 1911, and has served also as a director of the company since 1910.

C. D. Summy

C. D. Summy, acting general manager of western lines of the American Express Company at Chicago, Ill., has been elected vice-president of the new company and has been placed in charge of the southwestern department. Mr. Summy started his career as agent and transfer man of the American Express Company at Barnesville, Minn., in 1890. In that capacity he met all trains night and day and made deliveries in a push cart, for which he received a salary of \$50 a month. Three months later he was transferred to Red Wing, Minn., where he held the agency of the company for a year. He spent another three months as clerk in the superintendent's office at St. Paul, Minn., following which he went to Dallas, Tex., as chief clerk to the superintendent there. In the next year he was appointed assistant route agent and subsequently route agent in Texas with headquarters at Sedalia, Mo., St. Louis and Dallas, Tex., consecutively. In 1901 he became chief route agent, in 1903 assistant superintendent, and two years later superintendent of the Texas division with headquarters at Dallas. On the first of January, 1907, Mr. Summy was appointed assistant to the assistant general manager at Chicago. In the following year he was transferred to Omaha, Neb., as assistant general superintendent of the Iowa-Nebraska division. When American Express service was inaugurated on the Union Pacific lines in 1910 he was placed in charge of the newly created Overland division at Omaha. In 1911 he went to St. Louis, Mo., as manager of the southern department, and in 1918 was appointed acting general manager in charge of western lines at Chicago in place of J. A. D. Vickers, deceased.

A. Christeson

A. Christeson, vice-president of the Western departments of the new company, with headquarters at San Francisco, Cal., has been engaged in the express business for 40 years. He began as a driver for the American Express Company at Fort Dodge, Ia., in 1873, and the following year served as driver for that company at Dubuque. In 1875 he was promoted to messenger between Sabula and Marion, and later served as messenger on Sioux City and Yankton route. From 1877 to 1881 he was agent at Creston and in 1882 served at different times as agent and route agent. He was appointed assistant superintendent for Wells Fargo & Co. at Denver, Colo., and served in that capacity between 1883 and 1884. In the latter year he was appointed superintendent at St. Paul, Minn., which position he held until 1886, when he was made superintendent at Lincoln, Neb., and continued there until 1887. From January, 1888, to 1897 he was superintendent at Houston, Tex., and in January of the latter year he was appointed manager for the central department with headquarters at Kansas City. On January 1, 1899, his headquarters were transferred to San Francisco and he subsequently became general manager and finally vice-president and general manager of the same company.

Edgar M. Williams

Edgar M. Williams, who has been appointed vice-president of the Southern departments of the new company, with headquarters at Atlanta, Ga., entered the service of the Southern Express Company at an early age. In 1891 he was appointed secretary to M. J. O'Brien who was vice-president and general manager. Following the election of Col. O'Brien to the presidency of the company, Mr. Williams was appointed assistant to the president, which position he held until 1907, when he was made general superintendent and later general manager of the Western department. On

July 15, 1912, he was appointed second vice-president in charge of traffic, and in 1915 he was elected vice-president. On October 5, 1916, he was appointed vice-president in charge of traffic also of the Adams Express Company with office at New York.

Frederick S. Holbrook

Frederick S. Holbrook assistant to president of the new company with headquarters at Washington, D. C., was born September 25, 1864, and began railway work in 1881 as a clerk on the Ogdensburg & Lake Champlain at Norwood, N. Y. He served consecutively from 1886 to 1889 as chief clerk to the general agent of the same road, and later was agent of the same road, the Central Vermont and Canada Atlantic. From 1890 to 1893 he served as cashier of the Ogdensburg Transit Company at Chicago, then to 1895 he was cashier on the Central Vermont, New York, until 1899 when he was appointed commercial agent of the same road at New York. In February, 1900, he was appointed assistant general freight agent of the West Shore and about one year later became first assistant general freight agent of the New York, New Haven & Hartford at Boston. In July of the same year he was made general freight agent of the same road with office at New Haven and from September, 1908, he was chairman of the Committee on Uniform Classification at Chicago. From May, 1909, to January, 1912, he was chairman of the Official Classification Committee at New York. He was then appointed general traffic manager of Wells Fargo & Co., and since October, 1913, has served as vice-president in charge of traffic of that company.

Dixon S. Elliott

Dixon S. Elliott, vice-president in charge of traffic of the new company, entered the service of the American Express Company on December 9, 1879, as office boy and all-around assistant in the office at Kewanee, Ill. Two years later he was sent to Streator, Ill., as clerk. The same summer he was transferred to Geneva Lake, Wis., as a clerk and the following November was promoted to cashier at Galesburg, Ill. On January 1, 1883, when the joint office in Peoria, Ill., was discontinued and the American opened an office of its own, Mr. Elliott was sent there as one of the assistants to the agent. In October of the same year he was transferred to Davenport, Ia., as cashier and in the summer of 1884 was promoted to agent at the transfer point at Pacific Junction, Ia. After serving a year at Pacific Junction, Mr. Elliott was transferred to St. Joseph, Mo., as chief clerk in the superintendent's office of the Missouri division which position he held until the fall of 1887, when he was promoted to route agent with headquarters at Sioux City, Iowa. In 1889 he went to Chicago as chief clerk in the office of the general superintendent and in 1893, was made chief clerk of the specially created World's Fair Department of the American Express Company, having charge of the details of management of the World's Fair office. He was then appointed superintendent of the Nebraska division, but before the appointment could take effect changes in railway lines necessitated transfers in superintendents and another officer was assigned to the duties. When the American Express gave up its contract on the Great Northern in favor of the newly organized Great Northern Express Company in July, 1893, Mr. Elliott became superintendent of the Great Northern Company at St. Paul, Minn., at the same time looking after the interests of the American Express Company. In 1896 he was placed in charge of the accounting department of the Great Northern Company as auditor, and in 1901 was appointed general manager. In 1910 he was elected president of the Great Northern Express which position he held for the next five years. In March, 1915, he returned to the American Express Company to become vice-president in charge of traffic.

J. W. Newlean

J. W. Newlean, vice president and controller of Wells Fargo & Co., at Chicago, will be vice-president in charge of accounting of the new company. Mr. Newlean was born at Chicago in 1875 and entered railroad service in 1891 in the freight claim department of the Burlington & Missouri River, now a part of the Chicago, Burlington & Quincy. He later served in various capacities in the accounting department of the Union Pacific System and Southern Pacific. In 1909 he was appointed general auditor for the receivers of the Chicago Great Western and upon the reorganization of that company was appointed auditor. On January 1, 1911, he was appointed general auditor of the Illinois Central, the Yazoo & Mississippi Valley and the Indianapolis Southern. On March 7, 1912, he resigned to become controller of Wells Fargo & Company with headquarters at Chicago. He was elected vice-president and controller of that company on September 1, 1913.

E. E. Bush

E. E. Bush, manager of maintenance and purchases of the new company, entered the service of the American Express Company in December, 1880, as a driver and money clerk at Cedar Rapids, Ia. The following year he was transferred to the office of the superintendent of the Iowa division to serve as over and short clerk, and later as chief clerk first at Council Bluffs, Ia., and later at Des Moines. In 1887 he went to Chicago as chief clerk in the office of the general superintendent and three years later was appointed secretary to the second vice-president at Chicago. While in this position Mr. Bush became interested in the work of the western traffic department. When the traffic department in charge of all lines was established in New York in 1898, he was appointed secretary to the general traffic manager. Since that time he has been engaged exclusively in traffic department work, and in March, 1915, was appointed traffic manager in charge of all the company's lines.

T. B. Harrison

T. B. Harrison, general counsel of the new company, was born in Russellville, Ky., October 12, 1866, and was educated at Bethel College in Russellville, and in the University of the South at Sewanee, Tenn. In March, 1889, he was appointed stock claim agent and clerk to the district attorney for the Owensboro & Nashville division of the Louisville & Nashville, and at the same time practiced law in Russellville. In 1892 he went to Louisville as law clerk in the law department of the same road, and served successively as chief clerk, assistant district attorney for Kentucky, district attorney for Kentucky and general attorney for the whole system. He came to New York in January, 1908, as special counsel for the Adams and American Express companies, since which time he has been handling rate and tax and other important matters for these companies before the Interstate Commerce Commission, also before the state commissions and in the state and federal courts.

Charles W. Stockton

Charles W. Stockton, general counsel of the new company, entered the service of Wells, Fargo & Co. in 1881 as agent at Silver City, Idaho. The following year he was promoted to clerk in the superintendent's office in Portland, Ore. He was steadily promoted and in the early nineties served as division superintendent of Wells Fargo in Kansas. As part of his duties he helped to end outlawry in southern Kansas and Indian Territory and during a period of seven years in connection with Grover B. Simpson, now general superintendent at St. Louis, succeeded in cleaning up the

territory. He later studied law and was admitted to the bar. He then entered the legal department of Wells Fargo and gradually advanced until in 1913 he was promoted from commerce counsel to general counsel. On June 26, 1917, he became vice-president and general counsel at New York of the same company.

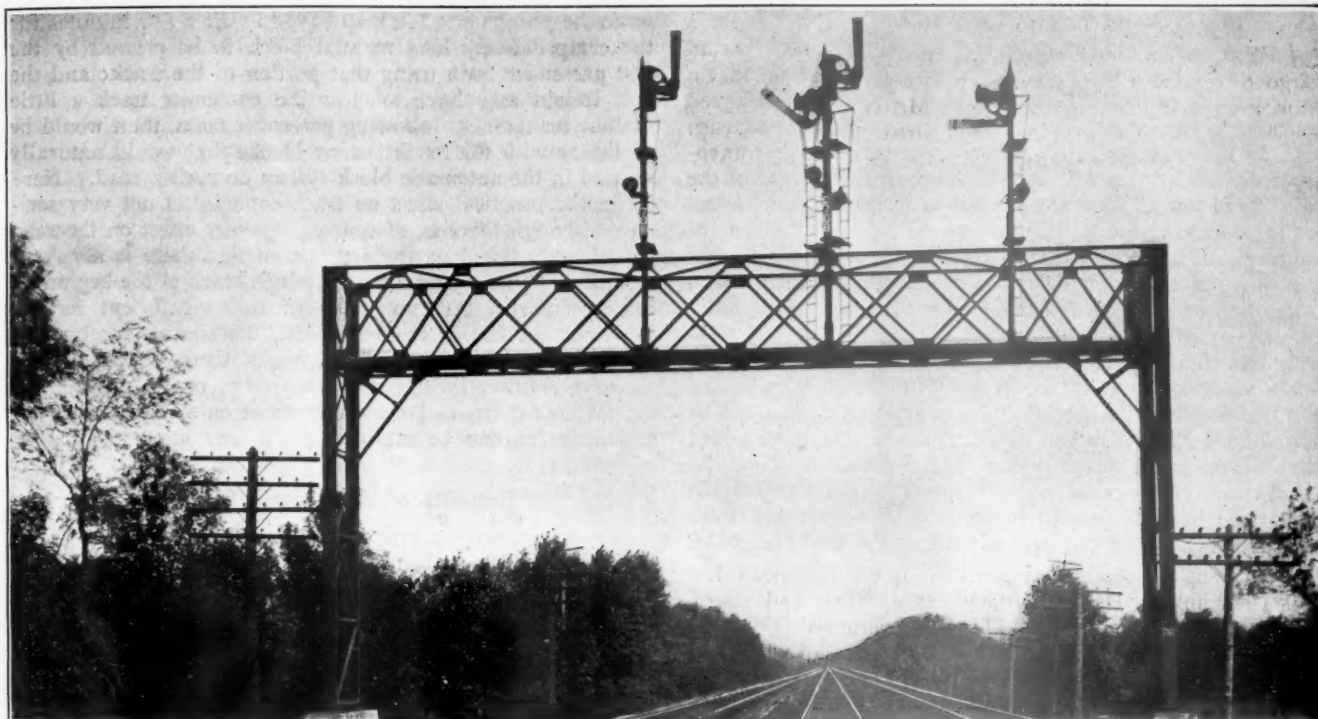
Agreement Between the Government and Express Companies

The agreement between the government and the express companies recites that "whereas the director general is of the opinion that the express transportation business upon the railroads and systems of transportation under federal control can be most efficiently carried on through the agency of a single corporation, which shall act as the sole agent of the government in conducting said business," the express companies shall cause to be organized a corporation for the purpose of carrying on for the director general the express transportation business upon the railroads under federal control and elsewhere, as may be determined by the director general.

From the gross revenue from express traffic on lines under federal control the company shall pay the director general 50¼ per cent. To the balance there is to be added the net revenue derived from operation over other lines, miscellaneous income and income from invested money or securities, to make up what is known as "gross contract income." From this the express company is to pay operating expenses, rentals, taxes, except war taxes, and other proper expenditures, the remainder being termed "contract income for division." From the contract income for division an amount equal to 5 per cent on the capital stock shall first be set apart for the payment of dividends or general corporate purposes, which shall be cumulative, and shall be termed "primary allowance." Any excess of contract income for division over the primary allowance up to 2 per cent on the capital stock shall be divided, one-half to the company and one-half to the director general. The remainder, to the extent necessary, shall be paid into a guaranty fund which shall not exceed 10 per cent on the capital stock and which shall be held by the express company to insure its ability to pay each year 5 per cent on its capital stock. Any earnings from this fund shall be considered as contract income for division. If the contract income for division in any year shall not be equal to 5 per cent, the amount lacking shall be withdrawn from the guaranty fund and the fund shall therewith be restored in the same manner as it was originally created. Any amount in the guaranty fund at the termination of the contract or that may be due thereto and not required for the purpose for which it was established is to be divided between the express company and the director general in the proportion of 40 per cent to 60 per cent. After the accumulation of the guaranty fund any contract income for division in excess of the 5 per cent primary allowance and the 2 per cent shall be divided as heretofore described.

It is provided that all salaries paid by the express company to its officers shall be reasonable and all salaries in excess of \$10,000 a year shall be reported to the director general. If he shall determine that any such salary is unreasonable and shall notify the express company in writing the maximum salary which he regards as reasonable, any amount in excess of the salary so fixed which shall be paid shall be excluded from any accounts of the express company used in determining the contract income for division.

Any controversy which may arise as to the performance of any part of the contract is to be submitted to and determined by the Interstate Commerce Commission after full hearing and its decision thereon shall be final.



How Signals Can Increase Track Capacity

A Ready Means of Increasing the Amount of Traffic That
Can Be Moved on Busy Multiple Tracks

By C. C. Anthony, Los Altos, Cal.,
Formerly Assistant Signal Engineer, Pennsylvania Railroad.

WITH A MODERATE train movement, not closely approaching its capacity, a railroad may be operated without signals with a fairly good degree of safety. Under certain peculiar conditions, such as are found on some elevated roads, operation at maximum capacity may even be carried on quite safely without signals. Under ordinary steam-road conditions, however, operation at maximum capacity, with a satisfactory degree of safety, is practically impossible without block signaling, at least. The question, therefore, is not whether greater capacity can be attained with or without signaling. Signaling being necessary for intensive operation with safety, the question is, How is the capacity of the road affected by the kind and character of the signaling? Block signaling, while increasing the safety of operation in a greater or less degree, may either increase or decrease the number of trains that can be run with reasonable safety on a given unsignaled road; its effect depends upon certain features of the installation. Of interlocking it may be said generally that it always facilitates train movement in some measure and so adds something to the capacity of the road.

Elements Affecting Capacity

The principal element of the block system that affects the capacity of the road, is, of course, the length of block; and, since manual blocks, because of the excessive operating cost of short blocks, are typically much longer than automatic blocks, automatic blocking may be said generally to be essential for maximum capacity. The effect of shortening blocks is shown, and a very fair comparison between manual and automatic blocking is supplied by calculations made on a large road on which controlled manual block had been in service for many years. It was assumed that passenger trains

averaged 1,275 feet in length and 35 miles an hour in speed; fast freight 2,075 feet and 20 miles an hour; slow freights 4,075 feet and 10 miles an hour. For the purpose of arriving at a maximum capacity it was assumed that there would always be a train ready to run when the track was available.

On a division having blocks (controlled manual) averaging 8,951 ft. in length on the passenger tracks, with a maximum length of 29,949 ft., it was found that 115 passenger trains could be run on each track in 24 hours, or 67 fast freight trains; or 32 slow freights. That is, these were the calculated track capacities for the three kinds of trains, assuming, in each case, that trains of the specified kind were run exclusively. With automatic blocks 4,200 ft. long, the corresponding figures were: 288 passenger trains, 180 fast freights, 90 slow freights. Except as the length of block varies in proper relation to the variations of speed imposed by physical conditions, etc., the maximum length of block controls the spacing of trains. But, from the point of view of signal equipment and operating force, average length is the basis of comparison. In this case, then, it appears that the reduction of the average length of the block from 8,951 ft.—a moderate length for manual block—to 4,200 ft., would multiply the track capacity for passenger trains about two and one-half times; for fast freights somewhat more, and for slow freights nearly three times.

Effect of Reducing Length of Block

If trains could be run "a block apart," every reduction in the length of block would mean a corresponding increase of capacity; but this is evidently impossible except in the case of trains moving at very moderate speed, which might safely run at an interval of a little more than the length of a

block. For high-speed trains there must be provision for a cautionary signal indication at a point so far in the rear of the stop signal at the entrance of any occupied block, that a train running at the highest practicable or permissible speed can make a service stop between that point and the stop signal. In the ordinary course, when trains are running unobstructedly, each train will keep far enough in the rear of the train ahead to find each signal clear as it approaches. Practically, therefore, the minimum interval between the rear of one train and the front of the following train must be somewhat more than the length of block plus the distance within which the fastest trains can make a service stop. This latter distance being fixed, reducing the length of block has relatively less and less effect on the interval between trains, as the blocks are made shorter. If the length of block is made less than the stopping distance, the cautionary indication must be carried back more than one block, at the cost of some added complication in the signal system; and the number of signals and the cost of the signaling will increase rather rapidly in comparison with the benefit in the way of permitting closer spacing of trains and consequently increasing the capacity of the road.

The running of trains at different speeds on the same track of course complicates the situation. For the slow trains the distance required for stopping is short; and short blocks with the cautionary indication one block in the rear of any signal at stop, as in ordinary practice, would be satisfactory, and would allow several such trains to be run in succession with about the minimum occupancy of the track. The fast trains, on the other hand, require cautionary indications at a greater distance from the stop signals; and if the length of block is made equal to this distance, so that the cautionary indication is again carried back only one block, the distance between slow trains, if they are spaced so as to receive clear signals, will be much greater than in the previous case, where the signals were assumed to be spaced to suit the speed of these trains. It is possible, of course, to meet both conditions in a measure, by a suitable arrangement of signals—with a certain amount of advantage in the particular case, for example, where there is frequently occasion to run several slow trains in the intervals between fast trains on a given track. High cost of the road or of additional trackage, as in a subway, may also require the attainment of extreme capacity by similar expedients in the arrangement of signals for relatively short blocks, even where all trains are of the same kind and all run at high speed. For ordinary conditions, however, a length of block equal to the distance required for stopping the fastest trains, gives about as great capacity as can be utilized to advantage.

Use of Passenger Tracks for Freight Movements

In practice, except sometimes in suburban territory, a multiple-track road does not usually have, or have in prospect, a passenger-train movement that approaches the capacity of two tracks; although the movement of freight trains may tax the capacity of two tracks. Under these conditions manual block may not seriously limit the capacity of the road if permissive blocking of freight trains, or of slow freights at least, is practiced. A few times each day it might be convenient to run two or three passenger trains closer together than (absolute) manual block will permit; but the greater spacing of the trains in a few cases of this kind does not greatly lessen the capacity of the tracks. The situation is not at all as it would be if a considerable number of passenger trains could be sent over the road in close succession, and the track could then be used by freight trains during a long interval; the conditions determining the schedules of passenger trains rarely permit such a favorable arrangement. The absolute block for passenger trains also causes a small loss of track use when freight trains are run on the passenger tracks in the longer intervals between passenger trains. The first freight going

on to the passenger track may have to wait a few minutes for the comparatively long manual block to be cleared by the last passenger train using that portion of the track; and the last freight may have to clear the passenger track a little earlier, for the next following passenger train, than would be necessary with the much shorter blocks that would naturally be used in the automatic block system on such a road. Here again the practical effect on track capacity is not very serious; although there is, of course, a greater effect on theoretical capacity based on the assumption that there is always a freight ready to enter upon a passenger track at the beginning of any interval between passenger trains sufficient for the movement of one or more freights. Permissive blocking of freight trains, however, or of most of them, assuming that slow freights are largely in the majority, makes possible almost, if not quite, as large a movement on a road of average alinement, as can be attained under any other method of operation.

Benefits of Automatic Signals

It is an interesting fact that automatic blocking has even been opposed, when about to be installed, on the ground that, with it, as good train movement would not be possible as under the manual block in use at the time, with permissive blocking for the numerous slow freights. This occurred on a busy four-track division of an important trunk line—a division having a very large through freight movement, and not a particularly favorable alinement for "running on sight." It is a still more interesting fact that, after automatic signals had been in service for a time, it was frankly admitted that the movement had never been handled better. Naturally the freight trains, when moving normally, would keep far enough apart under the automatic block to get clear signals and so avoid frequent stops. Presumably the freer and steadier movement due to running mostly on clear signals more than made up for the sacrifice of the closer running that is possible under permissive manual block.

The Assignment of Tracks

Interlocking affects the capacity of a multiple-track road in two quite different ways. In the first place, as on any road, whatever the number of tracks, it may facilitate the train movement by eliminating the stopping or slowing of trains at drawbridges, junctions and grade crossings of other roads. If such places are numerous the effect on capacity may be very material.

In the second place, the tracks of a multiple-track road cannot generally be used to capacity unless trains of different classes can be run on each track as opportunities arise. For this purpose groups of crossovers must be provided at frequent intervals; and these facilities practically cannot be used to advantage without interlocking. This full utilization of facilities depends also upon the assignment of the tracks, as to the current of traffic on each. In practice this seems to have been, to some extent, a matter of policy; use of the tracks to capacity has not always been the chief end. Probably the most notable examples of two exactly opposite policies in this matter is furnished by the assignment of tracks on the four-track lines of the New York Central (between Albany and Buffalo) and of the Pennsylvania.

When the New York Central was four-tracked the interchangeable use of the tracks was, very likely, given little if any consideration; the main idea seems to have been to separate the freight from the passenger traffic as completely as possible—partly, if not largely, for the sake of safety. Accordingly the arrangement was that of two double-track roads—the two south tracks assigned to passenger trains, eastward and westward, and the two north tracks to freight trains. Even with both pairs of tracks run righthandedly, an eastward train, for example, in moving from the passenger to the freight track, or vice versa, would have to obstruct the inter-

vening westward passenger track, and westward crossover movements would, similarly, block the eastward freight track. With right-hand running on the passenger tracks and left-hand on the freight tracks, as the tracks have been used for many years, eastward crossover movements block both westward tracks; although westward trains can be crossed over readily enough. In fact, in the absence of interlocked crossovers arranged for direct movement, without backing, the crossing of eastward trains, except in emergencies, was so nearly out of the question that back-off passing sidings connected with the eastward passenger track were provided for the use of certain fast freights that were regularly run on that track.

On the Pennsylvania the advantage of being able to use the tracks as desired, by crossing trains over without obstructing other tracks and without backing, was seen very early in the development of four-track operation. The two tracks on one side of the center line were, therefore, assigned to eastward trains, passenger and freight, and the two on the other side to westward trains. Except where the character of the traffic or some local conditions make the interchangeable use of the tracks impracticable or of no advantage, this is the most usual arrangement—as seen on the Lake Shore (now the New York Central West of Buffalo) and the New Haven roads, among others. At the same time full sets of crossovers (for direct movement from passenger to freight tracks and freight to passenger, at each place) with interlocking were provided. Finally, on four-track lines so equipped, trains were run with the current of traffic by signal; a freight train, for example, receiving a signal to cross over to the passenger track (used for movement in the same direction) would proceed without a train order and regardless of any passenger trains that might be overdue, and would continue on the passenger track until crossed back to the freight track at another interlocking. The despatcher, watching and directing the movement, was thus able to use every minute of available time on any track, without any of the losses of time or opportunity frequently met with in the use of train orders. By this method of operation, wherever each track is not fully occupied by trains of the class assigned to it, the capacity of a four-track road can be utilized in the highest degree. This kind of operation is also very convenient, and is often taken advantage of, as a means of getting a fast passenger train past a slower one without delay to either. In that case one of the passenger trains, of course, uses the freight track for a considerable distance. The result is often delay to freight trains, which may, in the aggregate, amount to a material reduction of capacity for freight-train movement. However, this is a matter of balancing the gain against the loss.

The Use of More Than Four Tracks

When more than four main tracks are required, it is commonly advantageous to assign at least two tracks to certain kinds of trains, either because one or more pairs of tracks can each be kept pretty fully occupied most of the time by trains of one speed; or because four of the tracks, say, can be operated more satisfactorily with certain entire groups of trains removed to tracks assigned to them exclusively than can six or more tracks with all kinds of trains intermingled to a certain extent in the effort to facilitate the movement of all as much as possible and to make the best use of every track. For example, two tracks on a six-track road may be assigned to slow freights which, following one another at the same speed, require very little attention from the despatcher. In fact, these two tracks may not even adjoin the other four, but, as in some actual cases, may be located several miles away where better grades and alinement can more readily be secured. There are also examples of two tracks so separated from the others and provided with passing sidings that trains of more than one speed can be run on them—as slow freights and certain fast freights—to the greater relief of the

four tracks operated interchangeably and in use quite frequently for running passenger trains around one another. In that case the advantage of interlocking again becomes apparent. Plants at the entrance switches of the sidings, by saving stops of trains, add something to the capacity of the tracks, and saving stops of freight trains of course means money saved whether or not increased track capacity is of any present value.

Even when the traffic is quite heavy for the number of tracks, the train movement may be so irregularly distributed that one track or another may be idle over considerable distances and for considerable periods a few times every day; at the same time the movement in the direction opposite to that of the current of traffic on the idle track may tax the capacity of the assigned tracks.

Movements Against Current of Traffic

Provision for movements against the current of traffic may then add materially to the capacity of the road under the actual conditions of train movement, which may not admit of much change and must, therefore, be handled as it exists. Such movements can be and are made readily enough by train order. But that these movements may be made to the greatest effect and so as to utilize every available interval on any portion of a track, it is highly important that the crossovers at every point be arranged for direct movement from any track to any other, in either direction, and, of course, interlocked. The ideal provision for such operation would be controlled manual block, permitting the running of trains in either direction on a given track by signal, without train orders, and automatic block signals for both directions. The latter is, perhaps, the more important equipment of the two; for if several trains can use an idle track, as many of them as possible should be sent through in the available time; they should not be impeded by long manual blocks from interlocking to interlocking in the direction against the normal current of traffic.

On the other hand, it may be found in practice that tracks can seldom be used against the current of traffic for any more extensive movements than the running of one or two trains around slower trains occupying their normal track. In that case, short (automatic) blocks in the reverse, in addition to the normal, direction, may not be of great advantage. Short blocks would be desirable, however, if there were frequent occasion, for example, to use two tracks in the normal direction for passenger trains of different speeds, for a distance of ten, twenty or more miles, while keeping a procession of freights moving by using one of the other tracks against the current of traffic.

Controlled manual block adds to the facility of the movements, as compared with train orders, in a rather small degree, and affords some increase of safety. If automatic signals are installed for the reverse movements, however, the additional cost of controlled manual block is a relatively small item. Up to the present time such elaborate equipment has been applied chiefly on the middle track of three-track roads, where the traffic is frequently reversed and short blocks are as important in one direction as in the other. Whether the cost of an extensive installation on a line of four or more tracks would be justified would have to be worked out by a careful study of the train movement, to determine how much time various stretches of track would be available, and how many trains there would be to use them against the current traffic. It is to be noted, however, that equipment of the inside tracks of a four-track road would ordinarily be sufficient. There could rarely be any advantage in crossing trains over one of the tracks assigned to trains in the opposite direction, in order to use the other, the outside, track against the current of traffic; it would be much simpler to concentrate the light movement on the outside track and use the inside track to facilitate the heavy movement.

The use of tracks against the current of traffic by train order seems to have been developed—at least to have attracted attention—on double track much more than on four-track roads. Well-known examples are the Chicago, Burlington & Quincy and the Cleveland, Cincinnati, Chicago & St. Louis roads. The latter particularly has been extensively signaled for movements in both directions on each track. The reason for the difference undoubtedly is that on double track the advantage stands out prominently; in no other way can fast trains pass slower trains without more or less delay to the slow trains on sidings. Whereas, on a four-track road, interference between fast and slow trains is largely eliminated by the duplication of tracks, and operation against the current of traffic may not seem to offer anything more than a small increase of this advantage; although a careful study might show that it would improve the train movement considerably.

The Importance of Interlocking

From everything here considered it is plain that signaling plays an indispensable part in the operation of a multiple-track road at or near capacity. Except possibly in a few special cases, block signaling is essential for the reasonably safe operation of trains at close intervals; and the necessity of short blocks makes automatic signals practically the only choice. With the heavy traffic for which a multiple-track road exists, interlocking at drawbridges, junctions and crossings becomes increasingly important as a means of keeping trains moving and so getting the maximum number over the road. Sets of interlocked crossovers, at intervals of a few miles, arranged for direct movements between all tracks, are essential for the full utilization of the tracks. And complete signaling for movements in both directions on part of the track is, in some cases at least, an effective means of adding to the capacity of the road under the actual conditions of train movement.

Important Orders of Western Regional Director

DURING THE PAST WEEK R. H. Aishton, regional director of western railroads, issued a number of orders, the most important of which are reproduced below:

Increased Freight and Passenger Rates

Circular No. 117, dated June 1, is an interpretation of the director general's General Order 28:

Many inquiries are being received relating to the application of General Order No. 28—Increased Freight and Passenger Rates—so far as the smaller roads are concerned. To correct any misunderstanding, this is to advise that General Order No. 28 applies to all steam railroads. Tariffs, therefore, should be filed increasing rates under General Order No. 28 for or by all steam railroads, and such tariffs should bear on the title page the legend shown at the end of exhibit attached to General Order No. 28, reading as follows:

"The rates made effective by this schedule are initiated by the President of the United States through the director general, United States Railroad Administration, and apply to both interstate and intrastate traffic.

"This schedule is published and filed on one day notice with the Interstate Commerce Commission under General Order No. 28 of the director general, United States Railroad Administration, dated May 25, 1918."

On passenger tariffs use word "fares." On baggage tariffs use word "charges."

Capital Expenditures

Circular No. 112, dated May 28, reads: The following is in answer to several inquiries which have been made by carriers relative to capital expenditures:

1. Carriers may contract and start work in excess of \$25,000 in advance of approval of D. C. E. Form 4, pro-

vided the work is included in the budget which was approved by the director-general or the director, division of capital expenditures, excepting those budgets which were conditionally approved. It is possible, however, that under certain conditions work authorized in the approved budget may be stopped, and in all contracts provision should be made by the carrier for such contingency.

2. Some carriers have understood the language of director general's Circular No. 25, calling for a progress report on additions and betterments, to make it applicable only to work approved on D. C. E. Forms 3 and 4. It is the intention that reports called for in said Circular No. 25 shall cover all work included both in the approved budget and in D. C. E. Forms 3 and 4 which have been submitted.

3. D. C. E. Form 3, which covers work costing less than \$25,000 and more than \$5,000, should be submitted at the time it is decided to proceed with the work covered thereby, and it is not necessary to wait until the work has been actually commenced.

Conserving Rubber

Supplement No. 3 to Circular R. P. C. No. 10, dated May 28, states: The division of transportation and the central advisory purchasing committee at Washington are again calling attention to the grave situation resulting from the shortage of crude rubber. In connection with the conservation of rubber the following should be observed:

1. All hose to be as small in size and short as possible consistent with the use it is to be put to. Check up car heating and washout plants particularly, as considerable saving can be made in some places.
2. Wire wound hose of less number of plies and at correspondingly decreased cost may often be substituted for special hose frequently used for withstanding high pressure.
3. Substitute lengths of iron pipe for hose wherever possible.
4. Discontinue the use of rubber mats and step treads in cars and other places where used.
5. Sheet rubber can often be replaced with composition packing at less cost and at the same time conserving the supply of rubber.
6. Old rubber should be carefully collected and disposed of as scrap.

Contracts Involving Labor and Material

Circular No. R. P. C. 12, dated May 28, reads: Apparently there is some misunderstanding as to the meaning of that paragraph in regional director's Circular No. 54, of March 27, which reads as follows:

"It should be understood that authority to do work does not carry with it authority to purchase material; if the material is not in stock, the department doing the work should procure it on approved requisition through the purchasing department."

The misunderstanding seems to exist in those cases where departments other than the purchasing department make contracts for erection of buildings, etc., which include both labor and material.

In such cases the following should apply: Competitive bids should be obtained from contractors. The bid should include an itemized list of equipment and material to be furnished, specifying grades of lumber, specification for brick, etc., with unit prices and the f. o. b. point at which they apply, with the understanding that the railroad company may furnish any or all of the items as it sees fit, and the bid be reduced accordingly.

These propositions should be submitted to the purchasing department and prices carefully checked by it to ascertain that they are not higher than government prices, on such material as prices have been fixed, and that prices quoted on other materials correspond with prices the railroad company is paying for similar grades. If the purchasing department can furnish some of the material more advantageously, the engineering or other departments should make

requisition for such material and the purchasing department should handle it. The desire is to obtain material at the lowest possible prices and to see that *no higher than government prices are paid* where such prices have been fixed. The fullest co-operation should be had between the engineering or other departments and purchasing department in respect to the handling of such contracts so that no delay will ensue.

Scrap Prices

Circular No. R. P. C. 13, dated May 28, states: The following ruling by the chairman of the sub-committee on scrap iron and steel, of the American Iron & Steel Institute, has been issued by the central advisory purchasing committee:

"We are having considerable trouble as a result of buyers making offers to your purchasing agents on scrap material 'to be used for special purposes,' and it now becomes necessary for us to enforce more rigidly the ruling recently made by Mr. Replogle and approved by us, namely:

"The prices approved by the President for iron and steel scrap cover all sales of scrap because it would be impossible to determine accurately at the time of sale for what purpose the material sold would finally be used. This basic principle may not be abrogated by any specific technicality."

"This means that rails, unless sold for relaying purposes, may not be sold at a price in excess of \$34 for any purpose whatsoever, while scrap rails may not be sold at any price in excess of \$29. Railway steel axles may not be sold at any figure in excess of \$46.50 delivered, irrespective of the use to which the buyer says they are to be put."

Locomotive Crane Requirements

In a communication, dated May 29, western roads were asked to wire not later than May 31, their requirements of locomotive cranes, steam shovels, electric traveling cranes and gantry cranes for the remainder of the year and not now under order, showing each separately.

District Freight Traffic Committee Is Appointed

The western freight traffic committee, A. C. Johnson, chairman, has appointed six district freight traffic committees in the western railroad region which will have charge of freight rules and regulations in their respective jurisdictions and will constitute standing committees, the members of which will give their entire time to this work when necessary. A proposal to change rates, rules or regulations may originate with the district committee or with any railroad operating within the jurisdiction of the committee. While it is expected and preferred that shippers shall deal with the appointed representatives of the railroads directly concerned, the district committee will be accessible to the public and will consider promptly any applications, complaints, or suggestions that may be submitted. Until further advised, the district committees will refer to the western freight traffic committee all proposals of changes in rates, rules or regulations on which they recommend action. The district committees are authorized to appoint sub-committees or call upon officers or employees of railroads in their respective jurisdictions for any required service or information.

The Chicago district freight committee will have headquarters at Chicago, and its jurisdiction will include the northern peninsula of Michigan, Wisconsin, Iowa, Illinois and Missouri on and north of the Chicago, Rock Island & Pacific between St. Louis and Kansas City. The members of the committee are as follows:

F. P. Eyman, chairman, freight traffic manager of the Chicago & North Western, Chicago. H. E. Pierpont, freight traffic manager of the Chicago, Milwaukee & St. Paul, Chicago. H. H. Holcomb, assistant freight traffic manager of the Chicago, Burlington & Quincy, Chicago. S. G. Lutz, vice-president in charge of traffic of the Chicago & Alton, Chicago. F. G. Banister, secretary.

The St. Louis district freight traffic committee will have headquarters at St. Louis, Mo., and will have jurisdiction over Missouri, south of the Chicago, Rock Island & Pacific between St. Louis and Kansas City, and all of the states of Oklahoma, Arkansas, Texas and Louisiana. The members of the committee are as follows:

J. L. West, chairman, freight traffic manager of the Missouri, Kansas & Texas, Dallas, Texas. W. A. Rambach, assistant freight traffic manager of the Missouri Pacific, St. Louis. F. Koch, member of rate committee Southwestern Tariff Committee, St. Louis. J. E. Johanson, member of rate committee Southwestern Tariff Committee, St. Louis. F. A. Leland, secretary, chairman Southwestern Tariff Committee, St. Louis.

The St. Paul district freight traffic committee will have headquarters at St. Paul, Minn., and will have jurisdiction over Minnesota, North Dakota, South Dakota and Montana east of Butte, Helena and Havre inclusive. The personnel of the committee is as follows:

H. M. Pearce, chairman, general traffic manager, Chicago, St. Paul, Minneapolis & Omaha, St. Paul, Minn. Henry Blakely, general freight agent, Northern Pacific, St. Paul, Minn. H. H. Brown, assistant traffic manager of the Great Northern, St. Paul, Minn. G. O. Somers, secretary.

The Kansas City district freight traffic committee will have headquarters at Kansas City, and will have jurisdiction over the states of Wyoming, Nebraska, Colorado, Kansas and New Mexico (Albuquerque and Deming and east). The committee is constituted as follows:

D. R. Lincoln, chairman, assistant general freight agent Missouri Pacific, St. Louis, Mo. F. Montmorency, general freight agent of the Chicago, Burlington & Quincy, Omaha, Neb. J. R. Koontz, general freight agent of Atchison, Topeka & Santa Fe, Topeka, Kansas. C. P. Dowlin, secretary, member of the rate committee of the Southwestern Tariff Committee, St. Louis, Mo.

The Portland district freight traffic committee, with headquarters at Portland, Ore., will have jurisdiction over Washington, Oregon, Idaho and Montana (west of Butte, Helena and Havre). The committee is as follows:

F. W. Robinson, chairman, traffic manager of the Oregon, Washington Railroad & Navigation Company, Portland, Ore. W. D. Skinner, traffic manager of the Spokane, Portland & Seattle, Portland, Ore. F. D. Burroughs, western freight traffic manager of the Chicago, Milwaukee & St. Paul, Seattle, Wash. S. J. Henry, secretary, assistant general western freight agent of the Northern Pacific, Tacoma, Wash.

The San Francisco district freight traffic committee, with headquarters at San Francisco, Cal., will have jurisdiction over California, Nevada, Utah, Arizona and New Mexico (west of Albuquerque and Deming). The personnel of the committee is as follows:

W. G. Barnwell, chairman, assistant freight traffic manager Atchison, Topeka & Santa Fe, San Francisco. G. W. Luce, freight traffic manager of the Southern Pacific, San Francisco. H. K. Faye, traffic manager of the Western Pacific, San Francisco. F. W. Gomph, secretary, agent of the Pacific Freight Tariff Bureau, San Francisco.

The western freight traffic committee also announces that the tariff publishing agencies named below will be continued:

Trans-Continental Freight Bureau, Chicago, R. H. Countiss, chairman. Western Trunk Line Committee, Chicago, E. B. Boyd, chairman. Southwestern Tariff Committee, St. Louis, Mo., F. A. Leland, chairman. Pacific Freight Tariff Bureau, San Francisco, Calif., F. W. Gomph, agent. Texas Tariff Bureau, Austin, Texas, A. C. Fonda, chairman.

Priority Instructions Re Material from Steel Companies

Bulletin No. 1, sent to purchasing agents of western roads on June 3, by the regional purchasing committee, reads: For your information we quote below paragraphs from instructions issued to steel companies, May 20, by E. B. Parker, Priorities Commissioner:

It is imperative that Railroad companies and locomotive builders should secure with reasonable promptness plates required to repair and build locomotives so that the railway motive power may be maintained, and additional locomotives constructed to meet war requirements. Instead of issuing priority certificates covering each order placed by railroad companies and locomotive builders, you are hereby authorized and directed to manufacture and ship to said railroad companies and locomotive builders now having or hereafter placing orders with you such fire box, boiler and tank plates as may be ordered by them of you; not to exceed, however, the proportion of your total plate output which the total tonnage of orders placed with you by railroads and locomotive builders bears to the total tonnage of all other plate orders covered by "Class A" certificates. Such manufacture and distribution of plates to railroads and locomotive builders shall be made concurrently with the manufacture and shipment to holders of all other "Class A" certificates.

Circulars of the Southern Regional Director

C. H. MARKHAM, regional director of the Southern district, has issued the following circulars:

Circular letter No. 199 directs attention to the order of the Interstate Commerce Commission specifying headlight requirements on locomotives and says:

"It is understood that some of the roads are not complying with the provisions of this order, pending the outcome of court proceedings. The director general has instructed that the order should not be modified, and that the railroads should proceed in good faith to carry out the terms of the order, i. e., that locomotives shopped for general repairs should be equipped with electric headlights, that any new locomotives should be so equipped, and that the work should be followed diligently. Please be governed accordingly. The locomotives which have been ordered by the Railroad Administration are all to be provided with electric headlights, conforming to the requirements of the Interstate Commerce Commission's order."

Circular letter No. 204 directs railroads to take up with the office of the regional director for authority before entering into any contracts for freight car repair work at outside shops. It is stated that this matter is being gone into extensively by the Car Repair Section, which will be prepared to undertake whatever freight car repair work it may be necessary to have done at outside shops.

In Circular No. 200 railroads are asked to furnish information regarding the handling of loss and damage claims, including a reproduction of the pay roll for the freight claim department for the month of May, enlarged to show the name of each clerk and department head, the duties of the employees in detail, their daily or monthly rate of compensation, percentage of time devoted to the handling of loss and damage claims and other classes of work, etc.

With Circular letter No. 201 was sent a statement showing claims for loss and damage to freight received during the year 1917, claims on hand May 1, 1918, and the number of months behind in final disposition of claims for roads under government control in the Southern region. Roads were asked to use this statement for the purpose of determining by comparison with other roads as to whether or not, judged by the number of claims received, each line is getting proper results in the matter of claim reduction, whether or not claims are being disposed of with a reasonable degree of promptness, and whether or not proper attention is being given to the clearing from suspense of claims charged to that account.

In Circular letter No. 202 the roads are asked to issue instructions covering the detailed regulation for the inspection, cooerage and selection of cars in fit physical condition for handling such commodities as grain, flour, sugar, etc., to the end that every possible precaution may be taken to insure the proper transportation of freight of a character likely to be damaged by reason of the condition of the equipment.

In Circular letter No. 205 roads are asked to advise promptly the percentage of section labor short on each line as of June 1.

Circular letter No. 207 states that in line with the general standardization scheme it has been recommended that the 40-ft. stock car be used rather than the 36-ft. car. That conclusion may be reached, the roads are asked to express their views on such questions as whether the all year revenue from a 40-ft. car will justify carrying around a 4-ft. longer car, the effect of the 40-ft. car on trackage, loading and unloading chutes, and as to which is the better car from a revenue-producing point of view.

Circular letter No. 208 states that the Norfolk & Western

has 15 light weight locomotives which it can spare for service elsewhere. A description of the locomotives is given and the roads are asked to advise if they desire to utilize any of these locomotives.

Conserving Material

Circular letter No. 211 outlines various ways of conserving material and reclaiming and repairing old material. In view of the increasing difficulty in obtaining a sufficient amount of iron and steel products, the circular says, it is more important now than ever that every piece of material that is fit for further use or that can be repaired and used should be used in place of new material. Under no circumstances must any material be scrapped until it is positively known that it cannot be repaired by some process or that the cost of repairs by suitable means is prohibitive, or that by some economical process it cannot be converted into another class of useful material. A list of some of the materials to be saved and methods of reclaiming is appended and roads are asked to send to the office from time to time lists of additional articles and methods, with full description when necessary, so that they may be published for the benefit of the other regional roads.

Industrial Railroads

In Circular letter No. 215 the railroads are asked to furnish complete lists of all industrial railroads touching any part of their systems, with name of owning industry, officer in charge, character of industry, junction point and connections with any other carriers, also number of miles operated and division or allowance, if any, per car or per ton, and total allowance for the calendar year 1917.

Passenger Fares

In order to familiarize agents and conductors with new tariffs ordered by General Order No. 28 and the method of constructing the new fares thereunder, it is suggested in circular letter No. 217 that the railroads arrange to hold day or evening schools of instruction, established in the larger cities, where there are headquarters of lines whose representatives have been in attendance at the rate meeting in Washington and who are familiar with the situation. This should be extended so far as possible by calling in the principal ticket agents on the line for similar instruction. Tariffs for this purpose are to be available by June 5. In this connection it is stated that as much publicity as possible should be given to the conditions that specific forms of tickets sold prior to June 10 will be redeemed and that this does not apply to commutation tickets.

Circular letter No. 220 quotes a letter from Edward Chambers, director of the division of traffic, stating that several complaints have been received in regard to the failure of railroads to make desirable passenger train connections, particularly at intermediate points, when it can be done by only slight readjustments in train schedules. Often these connections are broken by a few minutes of time, but the resultant delay to passengers is several hours. The railroads are asked to have this subject given the necessary consideration and to advise as to such connections as may need adjustment.

Circular letter No. 221 advises that contributions of railroads to Railroad Young Men's Christian Associations during the period of federal control may, until otherwise ordered, be made in reasonable amounts as heretofore.

B. L. Winchell became regional director of the Southern district on June 1. His first circular letter was No. 222 regarding salaries of railroad officers, in which the presidents of railroads in the Southern district were asked to furnish him with a statement of salaries paid to executive officers and heads of the several departments, indicating the titles of such officers and department heads.



Association of American Railway Accounting Officers in Convention.

Meeting of Railway Accounting Officers

**A Strictly Business Meeting Attended by 250 Members
Important Report on New Conditions**

THE 30TH ANNUAL MEETING of the Association of American Railway Accounting Officers was held on May 29 and May 30 at the Hotel Statler, St. Louis. After the singing of the Star Spangled Banner and an address of welcome by Mayor Keil of St. Louis, a letter from C. A. Prouty, director, division of public service and accounts of the United States Railroad Administration, was read in part as follows:

Letter from Director Prouty

At the last moment matters which cannot be postponed keep me in Washington. May I ask you to convey to your association and through it to the railway accountants of this country a single word from me?

The operating revenues which are reflected in the accounts kept by our accountants belong to the United States. The director general can remove or employ any accountant upon any railroad under federal jurisdiction. Our accountants are, therefore, in a direct sense the employees of the government. What the director general asks is that our accountants shall at all times bear this in mind and shall render to him loyal and efficient service. The accountant who measures up to that standard will be fully protected in his position, nor is there in contemplation any reorganization nor disruption of present organization which will affect his status for the future.

Personally I will, to the extent of my authority and of my influence with the director general, see that every accountant has fair treatment according to his desert, having reference both to the present and to the future.

But I appeal to you now upon a much broader ground. These railroads were taken under government control to win this war. The transportation which they alone furnish is fundamental and the war cannot be won without it. Whether our railroads can be successfully operated depends entirely upon their employees. No man, no matter what his

ability may be, can accomplish much without the loyal and efficient support of his co-workers from the lowest up to the highest.

The accountant who desires to do his full part in the present crisis can best serve his country by the faithful and painstaking performance of that thing which he is employed to do. Upon the broad ground of public duty, therefore, I appeal to you one and all to pull together, each man in his own particular sphere for the winning of this war.

It is a personal regret that I cannot be with you. I am not an accountant and could not discuss the problems of technical accounting, but there are certain things which I feel should be accomplished during this period of federal control in which the accountant plays a most important part and some of these things I should have been glad to suggest to you.

I am also anxious to become acquainted with our railway accountants. If anyone sees anything which in his opinion ought to be brought to my attention, he will confer a favor by writing to me. If his letter is marked personal I shall be sure to read it. I also hope that no accountant visiting the city of Washington will fail to call at my office. Let him state who he is and that he comes at my request.

Report of the Executive Committee

After some correspondence with Charles A. Prouty, director, Division of Public Service and Accounts, United States Railroad Administration, the following committee was appointed to confer with Director Prouty and also to represent the association in its dealings with the director general's office: A. H. Plant, chairman, comptroller Southern Railway; C. B. Seger, vice president and comptroller, Union Pacific; A. B. McDonald, vice president and comptroller, Southern Pacific Company; R. A. White, general auditor, New York Central; and Frank Nay, comptroller Chicago, Rock Island & Pacific. The remainder of the ex-

ecutive committee's report dealt with the various subjects connected with the administration of the association's affairs.

Corporate, Fiscal, and General Accounts

The attention of the committee was directed to a letter written by the chairman of the committee to the director general of railroads in which the aid of the Committee on Corporate, Fiscal and General Accounts, either as a whole or through an appropriate sub-committee, was tendered to him in connection with any matters relating to railway accounting which may arise under his administration.

The action of the chairman was approved and a sub-committee, consisting of A. H. Plant, chairman; C. B. Seger, R. A. White and A. D. McDonald, was appointed and directed to hold itself in readiness to act in the event its services are required. The sub-committee was given full power to act for the committee without referring individual conclusions to it for approval. Its actions and activities, however, are to be reported from time to time to the full Committee.

Government Transportation Accounts

The chairman of the committee advised it of the activities of the sub-committee on military transportation accounting in its efforts to speed up the settlement of accounts of the railroads against the several departments of the federal government for the transportation of men and materials. He pointed out that while substantial progress had been and is being made, delays to some extent continue, some of which are due, apparently, to inability to secure adequate clerical forces trained in the application of land grant rates and equalizations; others to the technical initial audits required under regulations, and still others to the adjudication of freight claims.

Efforts are being made in the following manner to overcome such delays and to, as far as practicable, enable the railroads to collect currently revenues earned by them for services rendered the government:

It has been suggested that the original audit be limited to administrative examinations, and that the accounts be paid immediately after such examinations. The railroads to guarantee to the government repayments of all discrepancies found in final audits to bases of classifications and tariffs applicable. Such a guarantee was authorized by the war board—a further guarantee has been authorized by the director general of railroads.

The adjudication of claims for losses and damages under existing regulations is more or less arbitrary, and to some extent unnecessarily delays the settlement of transportation accounts. The matter was brought to the attention of the Secretary of War, who promptly directed that a plan be devised by which such claims could be promptly and properly adjusted without delaying the settlement of transportation accounts.

Colonel G. F. Downey, Depot Quartermaster, Washington, D. C., wrote to the chairman of the Subcommittee on Military Transportation Accounting, in part as follows:

My plan is as follows: Do away with government bills of lading, and use commercial bills of lading with the same railroad routine for government freight now in use for private shipments, which is the bulk of the railroads' traffic and on which their methods of doing business have been based and brought to their present condition.

Instead of issuing a government bill of lading as now, give a freight transportation request to be exchanged for the accomplished railway bill of lading at the point of origin, similar to the present transportation request for passenger service which is exchanged for a railroad passenger ticket. In other words, handle freight traffic in exactly the same manner as passenger traffic, issuing a request to the initial carrier in return for the railroads' written guarantee to perform the service and make delivery.

The freight transportation request should be issued in triplicate and serially numbered, the railroad commercial bill of lading carrying the number of the transportation request and the transportation request carrying the number of the commercial bill of lading, which will be sufficient to connect up the shipment, thus leaving both the government and the

railroad to handle their records, accounts and billing by their own methods and not force them to adopt parts of the systems of the other.

Of the three copies, the original signed by the shipping quartermaster is given to the carrier's agent at point of origin, who turns it in to his railroad accounting head, who in turn uses it as a voucher in an account to the depot quartermaster, who will make settlement with the initial carrier as provided by law. The duplicate copy will be sent by the shipping quartermaster to the depot quartermaster, Washington, D. C., on the date of issue; while the third or tissue copy should remain with the shipping officer as his record of shipments made.

In exchange for this transportation request, the shipping quartermaster receives from the railroad agent an accomplished commercial bill of lading, and in turn sends it to the consignee. The consignee calls on the railway agent at destination, receives the goods, and surrenders the commercial bill of lading, thus closing the transaction. Claims for losses and damages will be adjusted by the consignee at time of delivery. If there is a shortage, the railway agent should so certify to the receiving quartermaster, who sends the certificate to the depot quartermaster, who will collect the claim from the carrier.

If the receiving quartermaster and the carrier's agent at point of destination cannot agree as to losses and damages and responsibility for the same, a full statement by each of the facts in the case with the bill of lading should be sent to the depot quartermaster, who will submit it to a board composed of a member from the railway accounting branch, a member from the auditor's office, and the depot quartermaster, or a similar board, who will settle the disputed claim. The action of this board to be final and settlement made immediately by the final carrier, if the responsibility is placed on him.

Presentation of this plan will be made to higher authorities, but I am submitting it to you in order to get an expression of opinion from the railroads before taking action. It proposes such a radical change, involving not only the war department, but also the treasury department and all other government agencies, that it may take time to put the plan into operation. But the railroads' approval and acceptance will materially hasten its adoption and will serve to relieve the present congestion of accounts.

The plans proposed by Colonel Downey were discussed and endorsed by the committee. The general scheme is approved. It was, however, pointed out that it would be necessary to work out the details of the plan proposed. The Accounting Committee, U. S. Railroad Administration, will endeavor to do this.

War Revenue Tax

The sub-committee handling this matter, consisting of A. H. Plant, chairman; A. D. McDonald and R. A. White, reported that it is co-operating with the Internal Revenue Department in handling questions arising with respect to the application of the war revenue tax and it has prepared a pamphlet covering all matters relating to the application of the tax.

Compilation of Ton Mile Statistics

The committee considered a letter of August 9, 1917, from G. J. Bunting, comptroller, Chicago, Milwaukee & St. Paul, with respect to carriers discontinuing the compilation of tons one mile in connection with merchandise or l.c.l. shipments. The committee is of the opinion that carriers should continue to compile ton miles.

The report was signed by A. H. Plant, chairman and was accepted by the association.

Committee on Freight Accounts

Interline Waybilling and Percentage Divisions

The special subcommittee to which this subject has been assigned did considerable preliminary work in the way of conferences with traffic officers and traffic organizations, and substantial progress was made looking to the adoption of through rates and simplified division bases.

As a result of the interest taken by members of Director General McAdoo's staff early in the year 1918, the attention of traffic officers and others was directed to the necessity for improvements along these lines, and in many cases the traffic associations were found ready and willing to undertake constructive work.

In view of the promulgation of general order No. 11 by the director general, and the expectation of a further general order providing for simplified divisions, as indicated in paragraph 13, of Order No. 11, it is felt that the subcommittee, for the time being at least, should cease its activities.

Shipping Bill as a Waybill

At its annual meeting held in Chicago, Ill., September 26 and 27, 1917, the Association considered the following letter from A. W. Lishawa, Assistant Auditor Freight and Ticket Accounts, Delaware, Lackawanna & Western Railroad Company, dated June 28, 1917, addressed to President Robinson:

At this period of activity when it is incumbent upon carriers to use every expedient toward greater efficiency in the transportation of freight and at the same time conserve their interests and reduce to a minimum the errors which, it is reasonable to expect, will increase as a result of the necessity of placing inexperienced clerks at stations, I wish to make a suggestion, the adoption of which will eliminate considerable work in waybilling and render the freight less liable to go astray, therefore, recommend the following:

Receiving agents, instead of preparing a waybill, shall use the shipping bill portion of the bill of lading in lieu thereof; this to be effective not only for freight local to the carrier transporting it, but for traffic to immediate connections, the idea being to allow the original document to go through to destination and treat it as a waybill. This would be advantageous in many respects and there will be no occasion for errors caused by transcription of information.

Under present conditions, the shipper prepares the bill of lading in three or more parts, of which he retains two; a third part, containing all the information necessary to move the freight, is given to the agent and is used as a basis for the issuance of the waybill, all the data originally shown on the shipping bill being transcribed thereon. To this operation alone it is safe to say that the majority of errors in waybills are due, especially in misreading the number of articles which in itself results in a large percentage of Overs and Shorts—mistakes in copying the name of consignee (which delays delivery; also, when waybills are prepared by forwarding station, the haste with which they are made, due to the "dupes" not being picked up until 4:00 p. m., is the cause of many errors therein—and other irregularities, all of which might be avoided by the use of the shipping bill as the original document.

Your committee considers the proposed plan as practicable by special arrangement with a limited number of shippers that are willing to co-operate with the carriers and have the necessary traffic organizations.

The plan is impracticable, under existing conditions, for general adoption, for the reason that forms in use by many shippers throughout the country are not uniform as to size and arrangement, and such uniformity is not obligatory upon shippers. There would be the further difficulty that carriers could not require shippers to furnish documents suitable for use as waybills.

Government Transportation

At the present time there does not exist any reason for not settling currently in interline accounts, waybills covering property for the government, and it is, therefore, recommended that paragraph 117, 1917 Synopsis, be canceled and that interline waybills covering property for the government be settled currently in the same manner that other interline waybills are settled.

Unit Waybill

The form of waybill prescribed in General Order No. 11, issued by the director general, is recognized as the A. A. R. A. O. standard form of interline waybill in lieu of A. A. R. A. O. forms 101, 101a, and 101b.

Incomplete and Illegible Freight Bills

The National Industrial Traffic League and your association are working together to bring about an improvement in the preparation of freight bills.

It is further suggested that the railroad agents and receiving clerks call attention of shippers, at time of receipt of freight for shipment, to any illegibility or defects in shipping orders with a view to proper correction at that time, and that similar co-operation be extended on the part of consignees in drawing attention of railroad agents to illegible or defective freight bills at the time such freight bills are tendered.

The report signed by W. W. Strickland, chairman, was accepted.

Committee on Passenger Accounts

Daily Plan of Interline Ticket Accounting

On account of the duplication of work in handling a multiplicity of items both for the initial and honoring carriers, this association does not recommend the daily plan of interline ticket accounting.

Government Transportation

Resolved, That all tickets issued on government orders be reported to interested carriers with revenue in the current month, such items to be transcribed on separate sheets marked "Government," the total to be included in regular report.

The association's recommendation as contained in paragraph 212, page 93 of the 1917 Passenger Synopsis is hereby rescinded.

Abolition of Prepaid Orders

Resolved, That this association reaffirms its previous recommendation for the absolute abolition of prepaid orders, system, local and interline, both in accepting and placing the orders by telegraph, mail, or sale of such orders or the transmission of cash for any such purpose, and be it

Further Resolved, That the members of this association prevail upon their respective passenger traffic officials to agitate this question in the various associations who have not as yet taken action in line with the foregoing.

The report was signed by L. C. Esschen, chairman, and was accepted by the association.

Committee on Disbursement Accounts

War Taxes Upon Foreign Lines' Freight Charges on Company Material

Resolved, That war taxes, when assumed as such by the carrier, on express charges or on foreign lines' freight charges on company material, also war taxes on parlor car and Pullman fares, telegraph and telephone tolls, club dues, etc., paid by the carrier or by its officers or employees, should be charged to Account 532, "Railway Tax Accruals," except that these taxes, when in connection with Road and Equipment projects, if assignable, should be included in the cost of the property acquired or constructed, and accounted for in accordance with the note under Account 75, "Taxes." And be it

Further Resolved, That the increased cost on account of increase in rates of postage should be charged to the appropriate Stationery and Printing Account.

These resolutions were referred back to the committee.

Other Committee Reports

A very comprehensive report was made by the committee on disbursement accounts, A. P. Disbrow, chairman, on the use of mechanical devices in disbursement accounting. This report was accepted and will be published in full in these columns next week.

The committee on terminal companies' accounts, on accounts with governments, on conference with the Master Car

Builders' Association, and on conference with the Freight Claim Association reported that they had had no matters referred to them and they, therefore, held no meetings. The committee for conference with the American Association of Passenger Traffic Officers, J. C. Briggs, chairman, asked that the subjects of uniform interline tickets, separate ticket coupons required by subsidiary companies, etc., be left with it, and the association, therefore, left these subjects with the committee for further consideration.

Revision of the Constitution

At its annual meeting in Chicago, September 26-27, 1917, the association adopted the following resolution:

Resolved, That the president and the two vice-presidents shall constitute a special committee on the revision of the constitution and by-laws, whose report shall be submitted for action at the next annual meeting of the association.

In order that the association may have before it an explanation of the reasons for some of the more important changes suggested, your committee submits the following explanatory statements:

Change in Name.—The present name of the association is composed of six words and is so long that it is practically never referred to by its full name, either in conversation or in writing. Members generally refer to it as "The Association." Railway periodicals and even some members call it the "Accounting Officers' Association," or some other abbreviated form.

The name suggested is the Railway Accounting Officers' Association.

Membership Qualifications.—Your committee submits a revision of the membership qualifications to the extent of restricting honorary membership, so as to make it truly an honor, and, therefore, difficult to obtain. The experience of the executive committee has demonstrated that this is necessary in order to prevent the honorary membership list growing beyond its bounds and to prevent honorary membership becoming so general as to lose its significance.

Voting.—Your committee submits a suggestion for clarifying the provision under which a vote by roads shall be taken, so that there may be no doubt as to the procedure under such conditions.

Ex-Presidents to be Members of the Executive Committee.—As the executive committee is charged with the duty of supervising and administering the affairs of the association, your committee has suggested a provision in the constitution that the ex-president is to be a member of the executive committee. That is the practice with some railway associations, clubs and other organizations. Your committee has suggested that the number of elective members on the executive committee be reduced to six, three for each year, the ex-president to serve for two years. The executive committee would then consist of: President, first vice-president, second vice-president, two ex-presidents (one to drop off each year and the last retiring president to succeed him), six elected members (three to be elected each year, instead of four as now).

This would have the effect of making the executive committee consist of each existing administration and would constantly give that committee the benefit of the ideas and experience of the two previous presidents, as well as the president, the two vice-presidents, and the six elected members.

A provision has been incorporated in the suggestion of your committee to take care of the situation arising from your members of the executive committee having been elected to serve on it one year beyond the term when this amended constitution would become effective. In order to provide for that condition, it is necessary that in the first year, if this suggestion is adopted, that only one ex-president serve on the ex-

ecutive committee and in the second year after the adoption of this provision and thereafter the full effect of it would be in force.

Change in Committees.—Your committee has offered the suggestion that the word "standing" be eliminated from the title of each committee, for the word is superfluous, as every committee provided in the constitution is inevitably a standing committee.

Your committee has also offered the suggestion that the name "Committee on General Accounts" be used in lieu of "Committee on Corporate, Fiscal, and General Accounts." The words "corporate" and "general" are synonymous, and, of course, all or nearly all railroad accounts are "fiscal."

Believing that the work of the Committee on Accounts with Governments might properly be handled by the Committee on General Accounts, your committee has suggested abolishing the Committee on Accounts with Governments.

Time of Annual Meeting.—The time provided for the annual meeting, the last Wednesday in the specified months, falls in the busiest part of the month for most accounting officers and automatically acts to decrease the attendance at the meeting. Your committee has, therefore, suggested that the association's annual meeting be held on the second Wednesday in the months from April to September.

President's Address

After the reports of the committees had been discussed and accepted, J. A. Taylor, president of the association and controller of the Central of New Jersey, made an address in part as follows:

Such momentous events have come to pass during the year just ended and our minds are so full of them that it is impossible to forego some reference thereto and as particularly affecting the members of this association, I refer to the fact that we are now directly enrolled in the service of the government and it behooves everyone of us to realize and appreciate that fact by standing shoulder to shoulder in support of it and putting aside all selfishness, buckle on the armor of self-sacrifice.

We are working in the office, some because our country requires it, some because age or condition demands it. We are doing hard work, good work, patriotic work, but compared with the lot of our soldiers in France, it's pretty easy for us. They live in the slime of the trenches, prepared to make the supreme sacrifice at any moment and we are slackers and traitors to them if we fail in one iota in our loyalty and our duty to them. We can do very little for them in comparison with what they are doing for us, but we can and must give them our deepest loyalty, not only in thought, but in deed and deny ourselves that they may not suffer.

Election of Officers

R. E. Burger, first vice-president of the association and assistant auditor of the Wabash, was elected president; A. D. McDonald, second vice-president of the association and vice-president of the Southern Pacific, was elected first vice-president, and J. G. Drew, vice-president of the Missouri Pacific, was elected second vice-president. Jerry Welch, assistant general auditor of the Chicago, Milwaukee & St. Paul, J. Leslie, controller of the Canadian Pacific, and H. D. Foster, assistant general auditor of the Chicago, Burlington & Quincy, were elected to succeed the retiring members of the executive committee.

EQUIPMENT EXPORTS from the port of New York during the month of March, 1918, consisted of locomotives valued at \$964,492, freight cars at \$455,360, and steel rails at \$305,198.—*Bulletin of the National City Bank, New York.*

General News Department

The National Safety Council has been restored to the list of associations, to the support of which the Railroad Administration allows railroad companies to contribute and charge the amount to operating expenses.

Moving oil in train loads as practiced in the west has been recommended for adoption on eastern railroads, and the car service section is holding a conference on the subject at Washington this week. E. B. McIntyre, of the western regional directors' staff, and B. L. Swearingen, supervisor of oil traffic at Kansas City, are explaining to eastern men the details of western practices.

The Switchmen's Union of North America, which held its annual convention in St. Louis, Mo., last week, passed a resolution petitioning the director-general to prevent the Brotherhood of Railway Trainmen from renewing percentage contracts with the railroads which guarantee that 85 per cent of railroad employees shall be members of the brotherhood. These contracts, the switchmen declare, operate to the disadvantage of switchmen who are members of their organization.

The Airplane Mail Service

The airplanes carrying mail between New York and Washington appear to have made good records on two of the six days in the third week of their career; or, at least, we find no unfavorable mention in the newspapers except on four days. On Thursday, May 30, there was no start from either end, because of mist. There is not much difficulty in starting in a fog, but there is liable to be great difficulty in selecting a place in which to land. On the 31st, a similar condition was reported, both from New York and Philadelphia. On Saturday, June 1, there was no start from New York, but the plane arrived at New York from Philadelphia on time, in 62 minutes. On Monday, June 3, Lieut. Millar started from New York about noon, but was forced to land at Woodbridge, N. J., near Rahway, because of trouble with his motor. He telephoned at once to New York, and Lieut. Webb, in another machine, went out to take his place. On Monday it was planned to take 200 pounds of letters by airplane from New York to Boston, but mishaps occurred in starting and the trip was given up. Cable despatches of May 27 announced the beginning, on that day, of a regular airplane mail service between Paris and London.

Chicago Railway Supply Companies' Red Cross Fund

The committee organized by the railway supply companies of Chicago to raise contributions to the Red Cross Fund succeeded in raising \$188,864. The committee's quota was only \$175,000, and, under all the conditions, the showing made is very gratifying.

Short Lines

In Atlanta, on May 24, the state railroad commissioners of Georgia, Alabama, North and South Carolina, Tennessee, and other southern states, held a conference on the matter of the status of the short line railroads, and will follow the lead of the Texas commissioners in making representations to Director General McAdoo in behalf of the taking over of all of the short lines.

Railroad Earnings for April

The Interstate Commerce Commission has made public a partial summary of railway returns showing revenues, expenses and income of 149 large roads for the month of April and for the four months ending with April. While the report shows a considerable improvement in April as compared with the preceding three months, the railway operating income for April is about \$2,000,000 less than for April, 1917, or \$65,234,392 as compared

with \$67,521,014. For the four months the report shows operating income of \$132,520,313 as compared with \$230,661,022. Operating revenues in April show an increase of \$45,000,000, but expenses increased \$47,000,000. For the four months the operating revenues were \$93,000,000 greater than in 1917, while the expenses were \$189,000,000 greater.

A Personal Injury Catechism

[Grand Trunk Safety Bulletin No. 18.—Abridged.]

Q.—What kind of a safety record did Grand Trunk men make last year?

A.—There was a decrease of about 22 per cent in the number of employees killed and of about 8 per cent in the number injured in 1917 compared with 1916.

Q.—Are most of the injuries received by employees of a serious or permanent nature?

A.—No. Only a small per cent are serious or permanent; but any case *may become serious*, especially cuts, open wounds and eye injuries where infection (blood poison) may develop. Every real injury should be given some attention and first aid obtained.

Q.—Why do we have to make reports of every little trivial injury?

A.—For two reasons. The injury itself may possibly develop more seriously than expected, in which case there should be a record; and we want to know how it happened, regardless of how serious was the result.

Q.—Then when you say a certain number of employees were injured during a certain period there is no distinction between the case of a mashed finger and the loss of an arm?

A.—No. And really there is no distinction from a prevention standpoint. What counts is the *cause, not the result*. It may, and often is, purely a matter of good fortune that a man receives only a mashed finger instead of loss of his limb or his life. For instance, a brakeman went between two moving cars to stop leakage between air hose. He slipped and fell, but fortunately his body was thrown clear of rail and only the ends of his fingers were caught by wheels. Every time a *preventable* injury occurs, one thing is absolutely certain. *There is something wrong with man, methods or material*; and the first thought in the mind of the foreman, or other person in charge, after the injured has been cared for, is to find out what and where the wrong is and correct it. Fully 80 per cent of all injuries sustained by railroad men can be and should be prevented. Train, yard, engine and trackmen get hurt most frequently, but this does not mean that these branches of the service are naturally of an extra hazardous nature. Hundreds and thousands, in fact a great majority of the total number engaged in train and track service, never get a scratch. But while this service is reasonably safe for the man who complies with the rules, it's mighty unsafe for the chance-taker and rule violator. There are some men who would get hurt if they had a job as floor walker in a department store. The man who has gone between moving cars time and again, when he hears of some other fellow getting killed doing that stunt (and it's a stunt that kills a lot of them every year), should do some mighty serious thinking. He should end up by saying "I'm alive and that lad is dead, not because I deserve to live, but solely because I was lucky. Doing work that way is a gambler's proposition, simply and solely. Guess I'll call it off right here and now." There's many a man in the cemetery or crippled for life who would be alive and able today if he had applied this little homely truth.

The two chief causes of injuries and deaths to train, yard, engine and trackmen are being struck by cars or engines and falling from cars or engines. It's the same on every road. If we could remove these two causes from our casualty lists, the statistical report of the Board of Railway Commissioners and of the Interstate Commerce Commission, so far as they would apply to these employees, would contain no more figures than a railroad-man's income tax schedule.

Q.—Is it possible to remove these two chief causes and others of like nature?

A.—Yes, mostly. But it cannot be done by making more rules, adding more safety appliances or changing existing methods of operation. It's purely and simply a man proposition. Nothing else. There were 14 Grand Trunk men killed last year by being struck by trains, cars or engines. Nine of these were struck in broad daylight and clear weather, with nothing whatever to prevent their seeing the engine or car, *if they had looked*. Three cases occurred during darkness, but with clear weather and only two when it was both dark and stormy or raining. In only one case were other cars or engines operating nearby at the time. One of these men was a fireman who had gotten off his engine and after going a considerable distance turned and stepped directly in front of a passenger train. It was daylight and clear and he had been twice warned to look out for that particular train. Another was a fireman going from roundhouse to office when it was dark and very stormy and was struck by engine backing up. One was a yard foreman struck by his own engine in clear daylight. One was a train baggageman who stepped upon track in front of engine. One was a shopman taking short cut across yard instead of going a few steps out of his way to reach regular pathway. One was a crossing watchman walking along tracks on his way home instead of using the street. In another case a yardman attempted to cross directly in front of an approaching car when it was raining and he slipped on wet rail, fell and was run over. One was a bridge watchman struck by engine on bridge. Four were trackmen at work on tracks and two were brakemen sent out to flag who sat down on track and went to sleep. Both these men had had ample rest before being called out and had been on duty but a short while.

Another thing that does not look right about this business. In six of the fourteen cases, no one on the engine or car saw the man before he was struck or knew that he had been struck, although four of these cases occurred in daylight and only two in stormy or rainy weather. When men are working on track, especially during unfavorable weather conditions, there is a duty on the part of engineers, firemen and men riding cars to look out for them and give ample warning. * * * Five yard foremen and helpers were killed while making coupling between bad order cars, because they failed to notify another crew switching on same track of their position, with result that other crew shoved cars against the cars they were working between.

Of the entire number killed only 6, or about 11 per cent, were killed as a result of any defect in track, structure, tools or appliances.

Operating Revenues and Expenses of Express Companies for 1917

The Interstate Commerce Commission has issued the following statement, subject to revision, compiled from monthly reports, showing operating revenues and operating expenses of the principal express companies for the calendar year 1917:

Item.	1917		1916		1917		1916		1917		1916	
	Adams Express Co.		American Express Co.		Canadian Express Co.		Great Northern Express Co.		Northern Express Co.		Southern Express Co.	
Charges for transportation.....	\$53,730,035	\$45,893,923	\$75,920,831	\$63,413,452	\$4,951,768	\$4,259,011	\$3,808,456	\$3,622,495	\$3,615,043	\$3,243,148	\$19,300,341	\$18,039,247
Express privileges—Dr.....	26,707,164	22,413,455	37,715,796	31,407,984	2,490,506	2,189,848	2,314,182	2,213,735	1,965,486	1,760,005	9,924,641	9,251,998
Operations other than transportation.....	630,830	603,527	3,894,238	3,233,224	152,254	125,216	69,879	62,195	52,389	49,602	395,746	403,725
Total operating revenues.....	27,653,700	24,083,995	42,099,273	35,238,692	2,613,516	2,194,379	1,564,153	1,470,955	1,701,946	1,532,745	9,771,447	9,190,974
Operating expenses.....	30,476,896	23,025,979	40,831,309	32,355,941	2,460,568	1,887,758	1,232,255	1,142,941	1,338,189	1,138,230	8,170,054	7,192,510
Net operating revenue.....	*2,823,195	1,058,016	1,267,963	2,882,750	152,947	306,621	331,898	328,014	363,757	394,515	1,601,392	1,998,464
Uncollectible revenue from transportation..	20,744	8,034	26,468	13,789	1,816	515	176	136	1,618	383	2,219	1,605
Express taxes.....	293,247	251,056	562,310	550,235	88,461	53,945	109,678	62,280	72,416	63,922	649,952	180,789
Operating income.....	*3,137,187	798,924	679,184	2,318,725	62,669	252,160	222,042	265,598	289,723	330,209	949,219	1,816,069
Total for companies named												
Item.	Wells, Fargo & Co.		Western Express Co.		Total for companies named		Total for companies named		Total for companies named		Total for companies named	
Charges for transportation.....	\$59,813,391	\$50,403,436	\$1,721,821	\$1,545,441	\$222,861,689	\$190,420,157	\$59,813,391	\$50,403,436	\$1,721,821	\$1,545,441	\$222,861,689	\$190,420,157
Express privileges—Dr.....	31,586,319	25,854,218	830,962	756,438	113,535,059	95,847,685	31,586,319	25,854,218	830,962	756,438	113,535,059	95,847,685
Operations other than transportation.....	1,351,269	1,191,925	46,892	45,475	6,593,500	5,714,894	1,351,269	1,191,925	46,892	45,475	6,593,500	5,714,894
Total operating revenues.....	29,578,340	25,741,143	937,751	834,478	115,920,130	100,287,366	29,578,340	25,741,143	937,751	834,478	115,920,130	100,287,366
Operating expenses.....	28,397,532	22,212,796	814,248	716,474	113,721,056	89,672,632	28,397,532	22,212,796	814,248	716,474	113,721,056	89,672,632
Net operating revenue.....	1,180,808	3,528,347	123,503	118,003	2,199,074	10,614,734	1,180,808	3,528,347	123,503	118,003	2,199,074	10,614,734
Uncollectible revenue from transportation..	17,542	16,420	170	81	70,757	40,967	17,542	16,420	170	81	70,757	40,967
Express taxes.....	511,849	468,552	24,705	16,929	2,312,622	1,647,692	511,849	468,552	24,705	16,929	2,312,622	1,647,692
Operating income.....	651,416	3,043,393	98,627	100,992	*184,305	8,926,075	651,416	3,043,393	98,627	100,992	*184,305	8,926,075

*Deficit or loss.

Railroads at Bargain-Counter Prices

Seven railroads in New Brunswick, aggregating in length about 250 miles, are being taken over by the Dominion government, evidently because they are unable to live independently. According to the Toronto Globe, from which we take the statement, these lines "were built when railroads were cheap," which means, perhaps, when investors of the too-hopeful class were having their own way too freely. The seven roads are named below. The date shown is that on which the government takes possession, and the "price" is the sum which has been voted by Parliament. For the two roads against which no date is shown, the negotiations are not yet completed:

	Length	Price
June 1. Caraquet & Gulf Shore.....	80	\$200,000
June 1. Elgin & Havelock.....	27	30,000
..... Kent & Northern.....	27	60,000
June 1. Moncton & Buctouche.....	32	70,000
June 1. St. Martins.....	30	75,000
July 1. Salisbury & Albert.....	45	75,000
June 1. York & Carleton.....	10	18,000

All of these roads have sufficient vitality to appear in the Official Guide, except the York & Carleton, and all of the time tables show at least one train each way every week day.

Southern Pacific Enginemen's Grievances Settled

A dispute between the Southern Pacific lines in Texas and Louisiana and a joint committee representing the enginemen, firemen and hostlers was settled on May 23 at Houston, Texas, by a board of arbitration representing the railroad, the men and the United States Board of Mediation and Conciliation. The main grievance was the practice of running engine crews off their regularly assigned divisions. The railroad company maintained that it had the right to use crews from one division when needed on another in irregular or emergency service, and while this right had been freely exercised from the earliest operation of the line, it had been done without abuse of the privileges of the men. The award of the arbitration board condemns the practice of running crews off their regularly assigned divisions and specifies that men shall not be so run except in case of undoubted emergency. It further provides that when crews are run off their regularly assigned division, they shall be returned "deadhead" or "light" to their respective divisions, unless there is sufficient traffic to use them in service without unnecessarily setting back assigned crews of the division.

A number of individual grievances were also settled in the award. In addition, the decision provided that employees who volunteer or are drafted for service in the army or navy will be granted leave of absence for the period of the war, and will retain their seniority rights, provided they return to railway service within a reasonable time after their discharge from military or naval service, and are in physical and mental condition to assume their duties as determined by the re-examination rules of the railroad.

Railway Revenues and Expenses

The Interstate Commerce Commission has issued a summary of railway revenues and expenses for the month of March and three months of the calendar year, covering the returns of 191 roads out of the 196 for which reports are usually issued. Railway operating revenues for March were \$365,347,593, as compared with \$316,614,123 in March, 1917. Expenses were \$282,864,296, or \$54,000,000 greater than for March, 1917, and railway operating income was \$67,351,846, or \$6,000,000 less than for March, 1917. For the three months, railway operating income shows a reduction of \$108,000,000, from \$189,882,892 in March, 1917, to \$81,630,244. Operating revenues were \$939,165,933, an

increase of \$57,000,000; operating expenses were \$813,192,279, an increase of \$162,000,000, and taxes were \$44,175,806, an increase of nearly \$4,000,000. The eastern roads had a deficit of \$4,989,725, while the southern roads had operating income amounting to \$31,124,822, and the western lines had an operating income of \$55,495,147.

The Interstate Commerce Commission has also issued summaries for January, February and March, covering only roads having operating revenues above \$1,000,000 in the year ended December 31, 1917. These tables include 180 Class I roads and 16 switching and terminal companies and are reprinted herewith.

SUMMARY OF MONTHLY REPORTS OF LARGE ROADS FOR JANUARY, 1918.

Item	United States				Eastern District			
	Amount		Per mile of road operated		Amount		Per mile of road operated	
	1918	1917	1918	1917	1918	1917	1918	1917
1. Average number miles operated.....	232,848.84	231,858.36	.....	.....	59,323.97	58,990.95	.....	.....
REVENUES:								
2. Freight	\$188,665,129	\$211,651,106	\$810	\$913	\$74,997,036	\$92,624,432	\$1,264	\$1,570
3. Passenger	66,467,628	59,418,166	285	256	26,417,557	25,482,731	445	432
4. Mail	4,575,990	5,441,955	20	24	1,751,939	2,202,832	29	37
5. Express	8,785,956	7,847,754	38	34	4,082,939	3,545,383	69	60
6. All other transportation	7,571,380	8,665,542	32	37	4,018,621	4,768,758	68	81
7. Incidental	8,752,071	7,624,233	38	33	4,821,005	4,084,022	81	69
8. Joint facility—Cr.	389,360	325,354	2	2	182,773	154,428	3	3
9. Joint facility—Dr.	123,766	130,365	1	1	74,039	78,261	1	1
10. Railway operating revenues.....	\$285,083,748	\$300,843,745	\$1,224	\$1,298	\$116,197,831	\$132,784,325	\$1,958	\$2,251
EXPENSES:								
11. Maintenance of way and structures.....	\$40,755,871	\$32,043,121	\$175	\$138	\$18,645,760	\$13,776,250	\$314	\$234
12. Maintenance of equipment	66,990,814	53,515,969	288	231	32,143,468	25,620,757	542	434
13. Traffic	4,912,701	5,324,127	21	23	1,903,149	1,989,180	32	34
14. Transportation	147,066,612	114,856,585	632	496	70,605,944	55,648,604	1,190	943
15. Miscellaneous operations	3,017,622	2,594,218	13	11	1,433,359	1,219,185	24	21
16. General	8,434,769	7,799,328	36	34	3,734,933	3,399,775	63	58
17. Transportation for investment—Cr.....	421,639	636,992	2	3	62,675	57,468	1	1
18. Railway operating expenses.....	\$270,756,750	\$215,496,356	\$1,163	\$930	\$128,403,938	\$101,596,283	\$2,164	\$1,723
19. Net revenue from railway operations.....	\$14,326,998	\$85,347,389	\$61	\$368	\$12,206,107	\$31,188,042	\$8206	\$528
20. Railway tax accruals (excluding "War Taxes").....	\$14,684,639	\$13,708,362	\$63	\$59	\$5,824,050	\$5,550,186	\$98	\$94
21. Uncollectible railway revenues	42,773	51,485	.....	.....	16,094	18,486	.....	.....
22. Railway operating income	\$840,414	\$71,587,542	\$82	\$309	\$18,046,251	\$25,619,370	\$8304	\$434
23. Equipment rents	\$81,795,599	\$83,338,030	\$88	\$15	\$83,156,658	\$84,272,457	\$853	\$872
24. Joint facility rent (Debit).....	1,092,192	1,009,986	4	4	596,716	518,046	10	9
25. Net of items 22, 23 and 24.....	\$83,288,205	\$67,239,526	\$814	\$290	\$21,799,625	\$20,828,867	\$8367	\$353
26. Ratio of operating expenses to operating revenues...%	94.97	71.63	.....	.....	110.50	76.51	.....	.....
Southern District								
Item	Amount		Per mile of road operated		Amount		Per mile of road operated	
	1918	1917	1918	1917	1918	1917	1918	1917
1. Average number miles operated.....	42,963.16	42,734.68	.....	.....	130,561.71	130,132.73	.....	.....
REVENUES:								
2. Freight	\$31,765,298	\$34,565,177	\$739	\$809	\$81,902,795	\$84,461,497	\$627	\$649
3. Passenger	12,058,852	9,312,640	281	218	27,991,219	24,622,795	214	189
4. Mail	725,517	779,232	17	18	2,098,534	2,459,891	16	19
5. Express	1,309,958	1,214,556	31	28	3,393,059	3,087,815	26	24
6. All other transportation	604,630	677,267	14	16	2,948,129	3,219,517	23	25
7. Incidental	1,099,488	894,477	26	21	2,831,578	2,645,734	22	20
8. Joint facility—Cr.	97,984	71,724	2	2	108,603	99,202	1	1
9. Joint facility—Dr.	21,923	21,118	1	1	27,804	30,986	.....	.....
10. Railway operating revenues	\$47,639,804	\$47,493,955	\$1,109	\$1,111	\$121,246,113	\$120,565,465	\$929	\$927
EXPENSES:								
11. Maintenance of way and structures.....	\$6,196,906	\$5,389,539	\$144	\$126	\$15,913,205	\$12,877,332	\$122	\$99
12. Maintenance of equipment	10,349,817	8,309,682	241	195	24,497,529	19,585,530	188	151
13. Traffic	925,420	1,073,594	22	25	2,084,132	2,261,353	16	17
14. Transportation	21,437,003	15,116,107	499	354	55,023,665	44,091,874	421	339
15. Miscellaneous operations	269,035	278,593	6	7	1,315,228	1,096,440	10	9
16. General	1,245,648	1,167,292	29	27	3,454,188	3,232,261	26	25
17. Transportation for investment—Cr.....	45,029	107,789	1	3	313,935	471,735	2	4
18. Railway operating expenses.....	\$40,378,800	\$31,227,018	\$940	\$731	\$101,974,012	\$82,673,055	\$781	\$636
19. Net revenue from railway operations.....	\$7,261,004	\$16,266,937	\$169	\$380	\$19,272,101	\$37,892,410	\$148	\$291
20. Railway tax accruals (excluding "War Taxes").....	\$2,153,545	\$2,061,063	\$50	\$48	\$6,707,044	\$6,097,113	\$52	\$47
21. Uncollectible railway revenues	7,210	8,793	.....	.....	19,469	24,206	.....	.....
22. Railway operating income	\$5,100,249	\$14,197,081	\$119	\$332	\$12,545,588	\$31,771,091	\$96	\$244
23. Equipment rents	\$422,598	\$1,137,140	\$16	\$27	\$938,461	**\$202,713	\$7	\$82
24. Joint facility rent (Debit).....	196,562	205,583	5	5	298,914	**286,357	2	2
25. Net of items 22, 23 and 24.....	\$5,326,285	\$15,128,638	\$124	\$354	\$13,185,135	\$31,282,021	\$101	\$240
26. Ratio of operating expenses to operating revenues...%	84.76	65.75	.....	.....	84.10	68.57	.....	.....

NOTE: There are included in this statement 79 roads in the Eastern District, 35 in the Southern District, and 82 in the Western District—total, 196 roads.

*Debit item.

*Excludes figures for Philadelphia, Baltimore & Washington R. R., and Wabash Pittsburgh Terminal Ry.

**Excludes figures for Colorado Midland Ry., Missouri Pacific Ry., and St. Louis, Iron Mountain & Southern Ry. Co.

Safety and Loyalty*

Never in our history was there a greater need for persistent accident prevention work than there is at the present time. A conservative estimate indicates that by the time this war is over the man-power of the world will be decreased 25,000,000 men, a number almost equal to the wage earning population of this country. Even today with our country at war must the cause of safety be upheld and its progress continued. Because lives are

necessarily sacrificed for a righteous cause on the battle front, other lives must not be unnecessarily sacrificed at home through carelessness and neglect. The killing of 22,000 and the injuring seriously of half a million industrial workers a year in all classes of industry in the United States is a serious drain on the man-power of the nation, at a time when every available man is needed for the work that is to be done. Our duty is clear; we must keep the machines going, keep the railroads and industries up to their highest point of productive efficiency—but we must keep as far as possible from having accidents or anything that will tend to lessen that efficiency.

Safety today involves a bigger thing than only industrial safety.

* Extract from an address delivered by Marcus A. Dow, General Safety Agent of the New York Central Lines, at a Safety Rally held in Keith's Theatre, Indianapolis, Ind., on Sunday, May 5.

SUMMARY OF MONTHLY REPORTS OF LARGE ROADS FOR FEBRUARY, 1918

Item	United States				Eastern District			
	Amount		Per mile of road operated		Amount		Per mile of road operated	
	1918	1917	1918	1917	1918	1917	1918	1917
1. Average number miles operated.....	232,887.00	231,847.22	.....	.....	59,322.71	58,990.91	.....	.....
REVENUES:								
2. Freight	\$198,508,874	\$185,138,707	\$852	\$799	\$82,389,517	\$80,215,739	\$1,389	\$1,360
3. Passenger	11,583,534	52,400,863	267	226	24,758,620	22,144,834	417	375
4. Mail	4,373,656	4,192,730	19	18	1,647,643	1,994,812	28	34
5. Express	9,033,427	8,666,245	39	36	4,336,379	3,416,096	73	58
6. All other transportation.....	7,867,080	7,802,940	34	34	4,248,532	4,341,397	72	74
7. Incidental	1,001,867	6,958,635	32	30	4,034,806	3,828,672	68	65
8. Joint facility—Cr.....	418,158	316,262	2	1	200,396	148,884	3	2
9. Joint facility—Dr.....	126,844	113,985	1	.....	64,617	64,927	1	1
10. Railway operating revenues	\$289,683,833	\$265,362,397	\$1,244	\$1,144	\$121,551,276	\$116,025,507	\$2,049	\$1,967
EXPENSES:								
11. Maintenance of way and structures.....	\$38,789,221	\$30,231,170	\$167	\$130	\$17,536,406	\$12,600,823	\$296	\$214
12. Maintenance of equipment.....	66,363,966	49,647,702	285	214	32,326,231	23,881,469	545	405
13. Traffic	4,570,160	5,203,003	20	22	1,757,857	1,940,424	30	33
14. Transportation	140,170,736	113,221,798	601	488	67,258,282	56,827,996	1,133	963
15. Miscellaneous operations	2,735,689	2,489,963	12	11	1,271,262	1,127,337	21	19
16. General	8,432,518	7,448,753	36	32	3,713,385	3,236,910	63	55
17. Transportation for investment—Cr.....	471,390	447,092	2	1	81,469	36,699	1	1
18. Railway operating expenses.....	\$260,590,900	\$207,795,297	\$1,119	\$896	\$123,781,954	\$99,578,260	\$2,087	\$1,688
19. Net revenue from railway operations.....	\$29,092,933	\$57,567,100	\$125	\$248	*\$2,230,678	\$16,447,247	*\$38	\$279
20. Railway tax accruals (excluding "war taxes").....	\$14,630,828	\$13,664,826	\$63	\$59	\$5,779,993	\$5,458,067	\$97	\$93
21. Uncollectible railway revenues.....	45,996	40,759	.....	.....	13,831	14,854	.....	.....
22. Railway operating income.....	\$14,416,109	\$43,861,515	\$62	\$189	*\$8,024,502	\$10,974,326	*\$135	\$186
23. Equipment rents	*\$1,068,656	*\$1,136,763	*\$5	*\$5	*\$2,579,613	*\$3,076,036	*\$44	*\$52
24. Joint facility rent (Dr. balance).....	1,104,816	1,032,888	5	4	595,972	\$580,191	10	10
25. Net of items 22, 23 and 24.....	\$12,242,637	\$41,691,864	\$52	\$180	*\$11,200,087	\$7,318,099	*\$189	\$124
26. Ratio of operating expenses to operating revenues...%	89.96	78.31	.....	.....	101.84	85.82	.....	.....
Southern District								
Item	Amount		Per mile of road operated		Amount		Per mile of road operated	
	1918	1917	1918	1917	1918	1917	1918	1917

1. Average number miles operated.....	42,969.04	42,735.46	.....	.....	130,595.25	130,120.85	.....	.....
REVENUES:								
2. Freight	\$36,041,809	\$30,893,712	\$839	\$723	\$80,077,548	\$74,029,256	\$613	\$569
3. Passenger	11,583,534	8,762,698	270	205	25,917,895	21,493,331	198	165
4. Mail	707,173	832,209	16	19	2,018,840	2,365,709	15	18
5. Express	1,207,727	1,208,230	28	28	3,489,321	3,041,919	27	23
6. All other transportation.....	625,941	607,891	15	14	2,992,607	2,853,652	23	22
7. Prudential	1,001,867	881,854	23	21	2,312,760	2,248,109	18	17
8. Joint facility—Dr.....	114,128	72,402	2	2	103,634	94,976	1	1
9. Joint facility—Dr.....	18,433	19,462	.....	.....	43,794	29,596	.....	.....
10. Railway operating revenues.....	\$51,263,746	\$43,239,534	\$1,193	\$1,012	\$116,868,811	\$106,097,356	\$895	\$815
EXPENSES:								
11. Maintenance of way and structures.....	\$6,301,947	\$5,045,338	\$147	\$118	\$14,950,868	\$12,585,009	\$114	\$97
12. Maintenance of equipment.....	10,298,752	7,622,851	240	178	23,738,983	18,143,382	182	139
13. Traffic	863,595	1,007,180	20	24	1,948,708	2,255,399	15	17
14. Transportation	20,285,982	14,707,709	472	344	52,626,472	41,686,093	403	320
15. Miscellaneous operations	271,706	282,978	6	7	1,192,721	1,079,648	9	8
16. General	1,234,848	1,131,561	29	26	3,484,285	3,080,282	27	24
17. Transportation for investment—Cr.....	86,753	64,486	2	1	303,168	345,907	2	2
18. Railway operating expenses.....	\$39,170,077	\$29,733,131	\$912	\$696	\$97,638,869	\$78,483,906	\$748	\$603
19. Net revenue from railway operations.....	\$12,093,669	\$12,506,403	\$281	\$316	\$19,229,942	\$27,613,450	\$147	\$212
20. Railway tax accruals (excluding "war taxes").....	\$2,183,127	\$2,075,845	\$51	\$49	\$6,667,708	\$6,130,914	\$51	\$47
21. Uncollectible railway revenues.....	13,078	6,745	.....	.....	19,087	19,160	.....	.....
22. Railway operating income.....	\$9,897,464	\$11,423,813	\$230	\$267	\$12,543,147	\$21,463,376	\$96	\$165
23. Equipment rents	\$247,818	\$1,406,660	\$6	\$33	\$1,263,139	†\$532,613	\$10	\$4
24. Joint facility rent (Dr. balance).....	139,449	137,938	3	3	369,395	†\$14,759	3	2
25. Net of items 22, 23 and 24.....	\$10,005,833	\$12,692,535	\$233	\$297	\$13,436,891	\$21,681,230	\$103	\$167
26. Ratio of operating expenses to operating revenues....	76.41	68.76	.....	.....	83.55	73.97	.....	.....

May 18, 1918.

*Debit item.

†Excludes figures for Philadelphia, Baltimore & Washington R. R., and Wabash, Pittsburgh Terminal Ry.

‡Excludes figures for Colorado Midland Ry., Missouri Pacific Ry and St. Louis, Iron Mountain & Southern Ry.

It involves not only the prevention of accidents but also the prevention of an invasion of our fair land by a cruel and destructive enemy. Every American today, to be true and loyal, has got to be a good safety man. He has got to put his shoulder to the wheel and give the best service that it is possible for him to give. He must give a full day's work every working day and should do nothing that will in any degree impair his ability or the ability of others to give that full measure of service. He must perform more work, steadier work, more conscientious work and more willing work than he has ever performed in his life before. For a railroad man to lie off work, even temporarily, merely to suit

his own personal ends, deprives the country unnecessarily of services that are needed; and, whether intended so or not, is an act of disloyalty. Careless work, shiftless work, indifferent work, "Don't give a hang" sort of work on the part of any man today is disloyalty to the country because it handicaps our boys over there in their effort to win this war. If every American can only realize this and go to his work each day with a clear head, determined to give a hundred per cent service, keep his mind on his job, work continually and yet work carefully, he will do more than all else to back up the splendid boys who are defending the gates of liberty over in France.

SUMMARY OF MONTHLY REPORTS OF LARGE ROADS FOR MARCH, 1918

Item	United States				Eastern District			
	Amount		Per mile of road operated		Amount		Per mile of road operated	
	1918	1917	1918	1917	1918	1917	1918	1917
1. Average number miles operated.....	232,910.36	231,672.65	.....	.....	59,336.95	58,985.01	.....	.....
REVENUES:								
2. Freight	\$259,588,843	\$227,271,167	\$1,115	\$981	\$115,140,845	\$102,907,740	\$1,940	\$1,745
3. Passenger	73,170,336	59,031,845	314	255	29,947,703	25,158,605	505	426
4. Mail	4,525,634	5,123,324	19	22	1,727,632	1,976,366	29	34
5. Express	9,577,710	8,501,812	41	37	4,597,328	3,967,531	77	67
6. All other transportation.....	9,446,257	9,156,433	41	40	5,278,104	5,157,335	89	87
7. Incidental	9,306,434	7,862,605	40	34	5,203,333	4,230,524	88	72
8. Joint facility—Cr.....	430,151	323,000	2	1	212,021	151,328	4	3
9. Joint facility—Dr.....	132,889	120,319	1	1	64,881	69,389	1	1
10. Railway operating revenues.....	\$365,912,476	\$317,149,867	\$1,571	\$1,369	\$162,042,085	\$143,480,040	\$2,731	\$2,433
EXPENSES:								
11. Maintenance of way and structures.....	\$43,805,888	\$35,358,498	\$188	\$153	\$18,859,182	\$14,736,464	\$318	\$250
12. Maintenance of equipment.....	73,849,923	55,295,596	317	239	36,507,811	27,082,362	615	459
13. Traffic	4,532,054	5,349,598	19	23	1,698,924	2,016,616	29	34
14. Transportation	150,166,420	123,165,005	645	532	73,152,030	61,962,514	1,233	1,051
15. Miscellaneous operations	2,982,641	2,681,219	13	11	1,386,137	1,197,658	23	20
16. General	8,565,106	7,782,183	37	34	3,798,392	3,454,220	64	59
17. Transportation for investment—Cr.....	473,846	603,650	2	3	71,946	51,963	1	1
18. Railway operating expenses.....	\$283,428,186	\$229,028,449	\$1,217	\$989	\$135,330,530	\$110,397,871	\$2,281	\$1,872
19. Net revenue from railway operations.....	\$82,484,290	\$88,121,418	\$354	\$380	\$26,711,555	\$33,082,169	\$450	\$561
20. Railway tax accruals (excluding "War Taxes").....	\$15,097,140	\$14,179,712	\$65	\$61	\$5,914,304	\$5,716,356	\$100	\$97
21. Uncollectible railway revenues.....	78,880	60,170	.....	.....	10,685	13,598	.....	.....
22. Railway operating income.....	\$67,308,270	\$73,881,536	\$289	\$319	\$20,786,566	\$27,352,215	\$350	\$464
23. Equipment rents	*\$3,074,744	*\$2,380,283	*\$13	*\$10	*\$3,394,095	*\$3,633,208	*\$57	*\$62
24. Joint facility rent (Dr. balance).....	1,058,660	1,002,173	5	4	557,633	\$574,133	9	10
25. Net of items 22, 23 and 24.....	\$63,174,866	\$70,499,050	\$271	\$305	\$16,834,838	\$23,144,874	\$284	\$392
26. Ratio of operating expenses to operating revenues...%	77.46	72.21	.....	.....	83.52	76.94	.....	.....
Item	Southern District				Western District			
	Amount		Per mile of road operated		Amount		Per mile of road operated	
	1918	1917	1918	1917	1918	1917	1918	1917
1. Average number miles operated.....	42,969.94	42,735.04	.....	.....	130,603.47	129,952.60	.....	.....
REVENUES:								
2. Freight	\$42,988,898	\$35,784,516	\$1,000	\$837	\$101,459,100	\$88,578,911	\$777	\$682
3. Passenger	13,178,153	9,248,265	307	216	30,044,480	24,624,975	230	189
4. Mail	722,398	790,090	17	19	2,075,604	2,356,868	16	18
5. Express	1,282,091	1,280,743	30	30	3,698,291	3,253,538	28	25
6. All other transportation.....	797,523	752,406	18	18	3,370,630	3,246,692	26	25
7. Incidental	1,277,745	1,142,102	30	24	2,825,356	2,589,579	21	20
8. Joint facility—Cr.....	109,374	71,611	2	1	108,756	100,061	1	1
9. Joint facility—Dr.....	19,784	19,624	.....	.....	48,224	31,306	.....	.....
10. Railway operating revenues.....	\$60,336,398	\$48,950,109	\$1,404	\$1,145	\$143,533,993	\$124,719,718	\$1,099	\$960
EXPENSES:								
11. Maintenance of way and structures.....	\$6,454,401	\$5,572,251	\$150	\$130	\$18,492,305	\$15,049,783	\$142	\$116
12. Maintenance of equipment.....	11,268,515	8,459,317	262	198	26,073,597	19,753,917	199	152
13. Traffic	846,676	1,034,979	20	24	1,986,454	2,298,003	15	18
14. Transportation	21,897,707	16,189,336	510	379	53,116,683	45,013,155	422	346
15. Miscellaneous operations	299,095	321,836	7	8	1,297,409	1,161,725	10	9
16. General	1,279,202	1,174,951	30	27	3,487,512	3,153,012	27	24
17. Transportation for investment—Cr.....	78,347	89,316	2	2	323,553	462,371	2	3
18. Railway operating expenses.....	\$41,967,249	\$32,663,354	\$977	\$764	\$106,130,407	\$85,967,224	\$813	\$662
19. Net revenue from railway operations.....	\$18,369,149	\$16,286,755	\$427	\$381	\$37,403,586	\$38,752,494	\$286	\$298
20. Railway tax accruals (excluding "War Taxes").....	\$2,216,107	\$2,138,508	\$52	\$50	\$6,966,729	\$6,324,848	\$53	\$49
21. Uncollectible railway revenues.....	10,961	16,562	.....	.....	57,234	30,010	1	.....
22. Railway operating income.....	\$16,142,081	\$14,131,685	\$375	\$331	\$30,379,623	\$32,397,636	\$232	\$249
23. Equipment rents	\$90,737	\$1,389,196	\$2	\$32	\$228,614	†\$136,271	\$2	*\$1
24. Joint facility rent (Dr. balance).....	229,638	182,357	5	4	271,389	†245,683	2	2
25. Net of items 22, 23 and 24.....	\$16,003,180	\$15,338,524	\$372	\$359	\$30,336,848	\$32,015,682	\$232	\$246
26. Ratio of operating expenses to operating revenues...%	69.56	66.73	.....	.....	73.94	68.93	.....	.....

*Debit item.

†Excludes figures for Philadelphia, Baltimore & Washington and Wabash Pittsburgh Terminal.

†Excludes figures for Colorado Midland, Missouri Pacific, and St. Louis, Iron Mountain & Southern.

Traffic News

Twelve miles an hour for over 35 hours is the speed record said to have been made recently by five loaded motor trucks from Akron, Ohio, westward to Chicago, 440 miles. The trucks arrived at Chicago in the evening, were unloaded and received east-bound loads, and started back the next morning.

The Wabash has discontinued the following trains: No. 6 leaving Chicago for Montpelier, Ohio, at 4:05 p. m., and No. 9 leaving Montpelier for Chicago at 6:30 a. m.; No. 3 leaving Detroit for Chicago at 3:15 p. m.; No. 13 leaving Detroit for Montpelier at 5 p. m., and No. 52 leaving Montpelier for Detroit at 7:45 a. m.

The Department of Agriculture reports that a commercial truck load of eggs was carried recently from Vineland and Millville, N. J., to New York city, about 140 miles, and was delivered with not one egg broken. Delivery from the shipper to the wholesaler was made in 15 hours. The 5-ton truck carried 150 crates of eggs weighing nearly 4 tons.

The North Pacific Coast lines have asked the Interstate Commerce Commission for authority to issue tariffs showing increased terminal charges on export freight. The proposal does not affect shipments (made in due season) for which government licenses have been issued and shipping space engaged, the purpose of the present action being to prevent congestion at the ports by freight for which necessary arrangements have not been made.

The freight traffic committee of the Railroad Administration for the Eastern territory announces that C. C. McCain, 143 Liberty street, New York city, will furnish information concerning through freight rates to and from points on railroads not reaching New York, in this function taking the place of the numerous offices heretofore maintained in New York city by Western and Southern roads. On westbound freight destined for shipment by steamship on the Pacific Ocean, Mr. McCain will issue export bills of lading, in exchange for the domestic bills of lading given by the Eastern railroads when the freight is forwarded.

Round trip passenger rates to the Pacific coast have been announced by the Railroad Administration, typical examples of which are:

New York to San Francisco.....	\$138.24
Boston to San Francisco.....	143.04
Baltimore to San Francisco.....	130.74
Washington to San Francisco.....	130.74
Pittsburgh to San Francisco.....	115.68
Chicago to San Francisco.....	87.60
Kansas City to San Francisco.....	72.60

These rates will go into effect on June 15 and the tickets will be good to return until October 31. The rates are about 20 per cent higher than those of last year.

Resolutions of Lumber Manufacturers' Association

The National Lumber Manufacturers' Association at its annual meeting at Chicago on May 21 adopted resolutions concerning minimum weights, weighing rules, and the bulkheading of lumber. The association opposes the plan of bulkheading lumber loaded on open cars, as proposed by a committee of the Master Car Builders' Association but approves the method of loading, as indicated by test car 90114, loaded under the auspices of the M. C. B. committee and the Southern Pine Association. It is believed that this last-mentioned method of loading is adequate to prevent shifting of load by ordinary handling. The association is opposed to the method of varying minimum weights according to the cubical capacity of cars, and favors a minimum of, for example, 34,000 pounds for cars under 36 feet long and 40,000 pounds for cars 36 feet long and over, provided that actual weights shall govern when cars are loaded to their full visible capacity, and that the minima applicable to the size of cars ordered shall be protected in the event cars of larger size are furnished by the carrier. Carriers are urged to accept the principle that lumber does not usually change in weight in transit, and that the initial weight should govern, except where reweighing shows a palpable error. The lumbermen desire that

carriers in Southwestern and Western Trunk Line territory shall become parties to the national code of weighing rules, whereby it becomes incumbent upon them to notify shippers of changes in weights en route.

Time for Paying Freight Bills

A large delegation of commercial traffic managers headed by G. M. Freer, president of the National Industrial Traffic League, protested vigorously to C. A. Prouty, director of the division of public service and accounting, on May 27, against some of the provisions of General Order No. 25, establishing a 48-hour credit basis for the payment of freight charges. They contended that payment within 48 hours would mean duplication of work in connection with the handling of claims for overcharges, and that both shippers and carriers would have to increase their clerical forces to carry out the plan. They suggested a period of one week instead of 48 hours. The principal point made by the shippers was that correct freight bills cannot be rendered within 48 hours, and that sufficient time is not allowed for checking by the shipper. Arrangements were made for further discussion of the subject in a conference of accounting officers and representatives of the shippers.

Coal Production

Production of bituminous coal during the week ended May 25 equalled and even slightly exceeded the record week of May 11, according to the Geological Survey report. The output of soft coal, including lignite and coal made into coke, during the week ended May 25 is estimated at 11,811,000 net tons, an increase of approximately 100,000 net tons over the production of the preceding week. The average production per working day is estimated at 1,968,000 net tons as against 1,952,000 net tons during the week previous and 1,829,000 net tons in May, 1917. Anthracite shipments fell off slightly during the week of May 25, amounting to 40,752 cars, against 41,011 during the week of May 18.

A Coal-Loading Record

A world's record was made, according to a report to Director General McAdoo in loading coal on the steamer "Tuckahoe," which docked at the Baltimore & Ohio Curtis Bay Pier, Baltimore, at 9:15 a. m., May 25, and started loading at 9:15 a. m., finished loading at 11:55 a. m., finished trimming at 12:05 p. m. and sailed at 2:10 p. m., having loaded in 2 hours and 55 minutes 4,992 tons, or 108 cars of bituminous coal for New England ports. The steamer was built by the United States Shipping Board, having been launched in 27 days and started on its cruise in 35 days, another world's record.

Extensive Thefts of Silk

The Silk Association of America has issued a statement in which it is declared that since January 1, 1918, thieves have operated 184 times in the New York and New Jersey districts, stealing parcels or bales of silk worth at least \$1,500,000. The war time price of silk has resulted in the organization of bands of thieves that rob lofts, express company stations and railroad cars night and day. Dealers and burglary insurance companies have been requested to be on the alert for the stolen silk, complete descriptions of which are furnished. The Erie Railroad alone is said to have suffered to the extent of about \$750,000; and other roads report thefts proportionally large. It is believed that much of the thieving is done by railroad employees, yardmen and switching men, who rob cars at night, conceal the loot and then get rid of it through confederates and "fences."

In Paterson one night last week a band of thieves backed a wagon up to a silk warehouse, removed bales of silk containing 14,000 yards, worth \$1 a yard, got away without detection and rushed the goods to a dye house, where they were changing to color from pink to black when discovered.

Every important silk manufacturing concern or dealer in the New York district has suffered heavily. The list of robberies, with details of stolen goods, covers fifteen closely typewritten pages.—*New York Sun*.

Commission and Court News

Personnel of Commissions

William A. Magee, of Pittsburgh, has been appointed a member of the Pennsylvania Public Service Commission.

Court News

Consignors' Liability for Freight Charges

In a suit brought by a railroad against the consignors and the consignee it was shown that 36 carloads of hay were shipped from Newport, Neb., to South Omaha, f. o. b. The hay was delivered to the Union stockyards Company on the consignee's order and without collecting the freight charges. The consignee became insolvent. The Nebraska Supreme Court held that the consignors were liable for the legal freight charges with the consignee.—*Chicago & N. W. v. Queenan* (Neb.), 167 N. W., 410. Decided April 12, 1918.

Overcharges and Undercharges

The federal district court for the Southern District of California holds, citing decisions of the United States Supreme Court and other jurisdictions in regard to other statutes, that under the California Public Utilities Act, if a rate be charged or collected different from the one published in the tariff a refund may be had in the case of an excess, or a recovery of the difference in case of an undercharge. No mistake of fact, or special practice, engagement, or understanding of the parties, will suffice to change this general rule.—*In re Independent Sewer Pipe Co.*, 248 Fed., 547. Decided March 4, 1918.

Rights of Purchaser of Railroad

The Ohio Supreme Court holds that where a railroad company organized under the laws of that state, with authority to exercise the sovereign power of the state, has built and operated as a common carrier a line of railroad, portions of which are along and across public highways or other railroads, the railroad becomes impressed with a public interest. A purchaser of it, either at judicial sale or otherwise, has no right to operate it for his own private purposes or the purposes of those with whom he may privately contract, to the exclusion of the public.—*State v. Black Diamond Co.* (Ohio), 119 N. E., 195. Decided November 13, 1917.

Connecting Railroads—Penalty for Delay

The South Carolina Supreme Court holds that the state statute making connecting carriers agents of each other and liable for damages caused by delays occurring on connecting lines with a right of action against the carrier at fault does not render a railroad liable under a statute penalizing delays where the delay occurred on the line of a connecting carrier. It would not be a reasonable construction to hold that the carrier which was not in default could be held responsible for loss, damage and injury to the property which it could recover and also for a penalty which it could not recover.—*Marion Cotton Oil Co. v. Atlantic Coast Line* (S. Car.), 95 S. E., 536. Decided March 8, 1918.

Webb-Kenyon Act in Oklahoma

The Oklahoma Constitution and Laws forbid the manufacture and sale of intoxicating liquors in that state. The Circuit Court of Appeals, Eighth Circuit, holds that as the purpose of the Webb-Kenyon Act was to remove from the protection of interstate commerce all shipments of liquor into those states, territories, or districts where the manufacture or sale thereof is unlawful, and to render the state law applicable, the interstate shipment of intoxicating liquor into the state of Oklahoma is unlawful, and a common carrier cannot be enjoined from refusing to receive such shipments. Interstate shipments of intoxicating liquor into por-

tions of Oklahoma which formerly were comprised in an Indian reservation are not authorized because the Indian titles have been extinguished.—*Missouri, K. & T. v. Danciger*, 248 Fed., 36. Decided December 27, 1917.

Res Ipsa Loquitur

The doctrine of *res ipsa loquitur* means that the circumstances connected with an accident are of such an unusual character as to justify, in the absence of other evidence, the inference that the accident was due to negligence. A locomotive boiler explosion was caused either by the engineer's negligence in admitting cold water into the boiler or the railroad's failure to repair the locomotive. In an action by the engineer for injuries caused by the explosion, the New York Court of Appeals holds that the plaintiff had the burden of proving that the accident was due solely to the second cause, and the rule of *res ipsa loquitur* did not shift that burden. *Francey v. Rutland* (N. Y.), 119 N. E., 82. Decided February 12, 1918.

Passenger on Shipper's Pass—Contributory Negligence

One who was traveling on a shipper's pass accompanying stock being carried to market got off the caboose at a station where the train was stopping, and while waiting at the station was ordered or directed by the station agent and a brakeman to take a key and deliver it to a trainman at the cattle pens and to ride back on that part of the train. He voluntarily obeyed the order or direction, and while getting upon the side of a car to ride back was caught between the side of the car and the cattle chute and received injuries from which he died. The Kansas Supreme Court holds that as he voluntarily placed himself in a position of obvious danger and was not engaged in looking after or caring for the stock in his charge, the railroad was not liable in an action to recover for his death.—*Shore v. Atchison, T. & S. F.* (Kan.), 171 Pac. 612. Decided March 9, 1918.

Notice of Arrival of Shipment

One who delivers property to a carrier consigned to himself at a place where he does not reside and has no representative or place of business, is bound to put himself in a position to receive notice, and, failing to do so, cannot be heard to complain that notice was not given. A consignor in Monte, Wash., shipped a carload of apples to himself at Crosby, N. D., with directions to stop for partial unloading at Kenmare, N. D. The party with whom the consignor had made arrangements to care for the apples at Kenmare knew of their arrival and found them in good condition when he made inspection. The Washington Supreme Court, in an action for damages alleging failure to properly care for the shipment, holds that, as the party at Kenmare was the consignor's agent for purposes of receiving notice, the railroad's failure to notify the consignor of the arrival of the shipment at Kenmare would impose no liability, notice to the consignor being unnecessary. The railroad's duty thereafter was that of a warehouseman.—*Rosenbaum v. Northern Pacific* (Wash.), 172 Pac., 238. Decided April 18, 1918.

Discrimination as to Switching Charges

The Illinois Supreme Court holds that it is a discrimination against shippers, within the prohibition of the State Public Utilities Act, for a railroad having the line haul to absorb the switching charges of cars delivered to it by certain roads, while refusing to absorb those on cars delivered by other roads, the only difference in the situation being that some of the roads are steam and the others electric. As the shipper, and not the connecting carrier, is the one affected, this is not a matter for contract between the roads.—*Commission v. Illinois Central* (Ill.), 119 N. E., 294. Decided April 17, 1918.

Section 52 of the Illinois Public Utilities Act provides that the Public Utilities Commission shall have power to enforce reasonable regulations for the weighing of cars and freight. The Illinois Supreme Court holds that this provision is inconsistent with, and therefore impliedly has repealed the prior state statute requiring railroad companies to install track scales on demand of shippers at stations from which a required amount of grain is shipped.—*Commission v. Cleveland, C. & St. L.* (Ill.), 119 N. E., 310. Decided April 17, 1918.

Equipment and Supplies

Government Cars and Locomotives

The central purchasing committee of the Railroad Administration is still meeting representatives of the specialty manufacturers and is distributing the orders for the equipment of the cars and locomotives ordered by the government. Most of the contracts have been decided upon in the case of the locomotives and the committee is working this week on the car specialties and some of those for the locomotives which have not yet been settled. It is expected that all of the orders will have been placed by the end of this week.

It is reported that orders for 392,000 axles for the cars have been awarded as follows: 95,000 to the Carnegie Steel Company, 84,000 to the Illinois Steel Company, 149,000 to the Pollak Steel Company, 16,000 to the Laclede Steel Company, 18,000 to the Pittsburgh Forge & Iron Company and 30,000 to the Midvale Steel Company.

Contracts for the draft gear for the 100,000 cars have also been distributed as follows: Sessions, 50,000; Westinghouse, 20,000; Cardwell, 15,000; Miner, 10,000, and Murray, 5,000.

Freight Cars

A. J. OLIVER, Houston, Tex., is inquiring for tank cars.

THE UNITED STATES WAR DEPARTMENT is inquiring for 100 40-ton tank cars.

THE INDUSTRIAL MANUFACTURING COMPANY, New Orleans, La., wants to rent three to six tank cars.

THE OKLAHOMA PETROLEUM & GASOLINE COMPANY, Tulsa, Okla., is inquiring for 100 to 200 10,000-gal. tank cars.

Miscellaneous

FOREIGN TRADE OPPORTUNITIES.—Commerce Reports for May 31 contains the two following foreign trade opportunities. Information concerning them may be obtained from the office of the Bureau of Foreign and Domestic Commerce at Washington or from any of its district and co-operative offices.

27012.—A railway company in Spain desires to purchase 2,000 tons of steel railroad rails about 10 meters in length, weighing from 20 to 30 kilos per meter, and profile of section to follow as closely as possible to that shown in drawing, which may be examined at the Bureau or its district offices. (Refer to file No. 100525.) It also wishes to purchase all secondary material, such as plates, spikes, etc. Quotations may be made f. o. b. New York. Payment will be made by cash against documents or to suit seller. Correspondence should be in Spanish. Reference.

27016.—A French firm in England wishes to purchase locomotives, trucks, carriages, wagons, etc., for railways, new or second-hand. Is also open to any agency proposition. Reference.

Signaling

THE RICHMOND, FREDERICKSBURG & POTOMAC has placed an order with the Union Signal Construction Co. for the complete installation of an electro-pneumatic interlocking at Acca Wye, Richmond, Va.; a 57-lever machine including 6 spare spaces. The switches will be operated by Model 14 electro-pneumatic movements, equipped with Style "C" switch valves. A. C. track circuits will be provided throughout. The material is being furnished by the Union Switch & Signal Company.

THE NEW YORK, NEW HAVEN & HARTFORD has ordered from the Union Switch & Signal Company the material for an electro-pneumatic push button machine for the operation of the switches and signals at the new Cedar Hill Classification yard, New Haven, Conn. The machine has 42 units for switch operation, 2 for signal operation and 4 spare spaces. The switches will be operated by direct acting electro-pneumatic switch movements with direct current track circuits provided for detector locking.

Supply Trade News

The United States Metallic Packing Company, Philadelphia, has moved its offices in that city to 221 North Thirteenth street.

Lloyd H. Atkinson has resigned his position as president of Atkinson & Utech, Inc., to become vice-president of the Air Reduction Company. He will, however, continue to serve on the board of directors of Atkinson & Utech, Inc. John J. Utech has been elected president to succeed Mr. Atkinson, and I. W. Glasel has become secretary and treasurer of the same company.

Joseph W. Weinland, sales manager of the brake beam department in the Chicago office of the American Steel Foundries, has been appointed district manager of the

Liberty Steel Products Company, with headquarters at Chicago. Mr. Weinland was born at Chatsworth, Ill., on December 13, 1877. In 1902, he entered the service of the Western Steel Car & Foundry Company, as assistant purchasing agent. A considerable part of his time was spent on the Pacific coast, purchasing lumber to be used in the building of cars. Later he was promoted to purchasing agent of the Anniston, Ala., shop. For a period of five years following 1907, he was engaged in the construction and sale of 50 houses at Burnham, Ill. In 1912 he entered the railway supply field with the American Steel Foundries as sales manager in the brake beam department, which position he held until his recent appointment, as mentioned above.



J. W. Weinland

Charles A. McCune, for 12 years connected with the Commercial Acetylene Company of 80 Broadway, New York, has resigned to accept the position of sales engineer with the

Page Steel & Wire Company, 30 Church street, New York. Mr. McCune was born in Jersey City, N. J., in 1879, and before entering the acetylene field was for several years connected with the Safety Car Heating & Lighting Company. He left in 1906 to take up the duties of assistant engineer with the Commercial Acetylene Company and since then has been actively engaged in this industry, his work in the greater part being devoted to the development and application of dissolved or compressed acetylene.



C. A. McCune

In 1908, he perfected the first successful inverted acetylene burner and mantle for railroad car lighting purposes; this system being partly used on the Delaware, Lackawanna & Western until a few years ago, when the road practically went over to electric lighting. In 1916, Mr. McCune became chief engineer of the Commercial Acetylene Company. Mr. McCune will

be succeeded by **David Ahldrin**, who was formerly connected with the A-G-A Company and also the Commercial Acetylene Company.

Walter J. Cummings, vice-president of the McGuire-Cummings Manufacturing Company, Chicago, has been elected president, succeeding **John J. Cummings**, deceased.

The **Parkesburg Iron Company** announces the following changes among its resident sales managers, effective June 1, 1918: **R. J. Sheridan**, New York and **G. W. Denyven**, Boston; after July 1, 1918, **J. A. Kinkead**, San Francisco. The other selling representatives remain the same as at present.

Frank Lucas DeArmond, who for a number of years has been an officer of the Protectus Paint Company, Philadelphia, has severed his connection with that company for the duration of the war, having been appointed a captain in the quartermaster's corps, construction division.

The **Dayton Manufacturing Company**, Dayton, Ohio, announces the election of the following officers at its recent annual meeting: **J. Kirby, Jr.**, president and general manager; **N. Emmons, Jr.**, vice-president and assistant general manager; **J. Leidenger**, second vice-president, and **H. D. Hendrick**, secretary and treasurer.

The election of **Stephen C. Mason**, secretary of the McConway & Torley Company of Pittsburgh, as president of the National Association of Manufacturers, announced in last week's issue, is of more than ordinary interest to the railway and railway supply field, because Mr. Mason's entire business career has been confined to some branch of railroad work. He began on November 10, 1880, as a station agent in his home town, Lyndonville, Vt. As soon as he took up the work he learned telegraph operating, and before he was 20 years old was called to the headquarters of the Connecticut & Passumpsic Railroad, and made local freight agent at the headquarters of the division. After a few months' service there he was taken into the superintendent's office and made his private secretary. After the creation of the Interstate Commerce Commission, Mr. Mason applied for and secured a position with that body in Washington first in the office of the auditor of the commission, where he had charge of the tariffs filed by the railroad companies. Upon the creation of the division of statistics, of which Professor Henry C. Adams was the head, Mr. Mason was placed in that department, and remained there until 1896, when he occupied the position of assistant statistician. At that time he was offered a position with the McConway & Torley Company of Pittsburgh, which he accepted in January, 1896, and in whose service he has been continuously ever since. He has served in various capacities. His first experience was gained as a traveling representative, after which he acted as assistant to the superintendent of the plant, thus gaining a practical experience in the manufacturing operations. Later he was designated assistant to the president, an office which he held until the death of **Charles B. Krauth**, when he was elected secretary of the company, and some two or three years later made a member of the board of directors.

Alfred R. Miller, treasurer of the Canadian Westinghouse Company, Hamilton, Canada, died at his home in that city, April 28. His whole business life was devoted to the interests of the Westinghouse Company. He entered their service as bill clerk in 1897, was promoted consecutively to head bookkeeper in 1903, acting assistant treasurer in 1904, assistant treasurer in 1907, and treasurer in 1917.



S. C. Mason

Allis-Chalmers Manufacturing Company

The net income of the Allis-Chalmers Manufacturing Company, Milwaukee, Wis., for the year 1917 was \$4,010,490.51, compared with \$3,165,020.23 for the calendar year 1916. The comparative earnings by quarters for the last two years are as follows:

	1917	1916	Increase
First quarter	\$900,672.94	\$740,336.89	\$160,336.05
Second quarter	1,002,455.56	950,760.90	51,694.66
Third quarter	919,404.38	545,199.98	374,204.40
Fourth quarter	1,187,957.63	928,722.46	259,235.17
	\$4,010,490.51	\$3,165,020.23	\$845,470.28

The large volume of business now on order, the company's annual report states, insures the utilization of stocks of materials at present on hand. The company has continued to establish liberal reserves to cover the contingencies of operation. The larger production requiring more intensive operation, and the bringing into service of machines and equipment unused for some time, together with expenditures designed to increase efficiency in manufacture, have resulted in increased expenditures for maintenance and larger reserves for depreciation. The amount expended during the year for maintenance, renewals and general upkeep of plant and equipment was \$1,889,603, all of which amount has been charged to the cost of manufacture. In addition to this sum there has been set aside for depreciation of plant and machinery and charged to cost of manufacture a total amount of \$941,908.

Reserves have been set aside before the determination of profits, which it is estimated will meet all requirements for taxes. Development expenditures for drawings, patterns, tools and experiments designed to improve and broaden the present lines of manufacture and to provide for new lines have aggregated \$251,257. These expenditures have been charged to the cost of manufacture.

In 1917 four dividends of 2½ per cent each were declared on the preferred stock; this is a total of 10 per cent for the year, of which 7 per cent was for regular dividends and 3 per cent was to apply on account of accumulated dividends. After these payments there remained 7 per cent in arrears on accumulated dividends on the preferred stock. The book surplus at the close of the year 1917, after deducting dividends paid and declared, was \$5,463,604.

To provide for the delivery of the largely increased volume of business, it has been necessary to expend larger amounts than usual for capital improvements. These expenditures, aggregating \$1,187,500 consisted principally of additions to equipment and extensions to plant buildings. A large portion of the additional equipment was built in the company's shops, and the extensions to plant have been along lines contemplated in the original plans.

The net working capital of the company as of December 31, 1917, comprising cash, receivables, marketable securities, and current inventories, less accounts payable, payrolls, dividends and taxes accrued and other current obligations, amounted to \$16,431,546, as compared with \$13,831,163 on December 31, 1916, an increase of \$2,600,383 for the year. While offering our services and available equipment to the government, and co-operating in every way possible in the government's program connected with the successful prosecution of the war, the company has accommodated its regular customers and continued to extend its regular lines of manufacture to the fullest extent possible under the circumstances. The volume of business on hand on December 31, 1917, was \$27,087,251, an amount substantially in excess of the unfilled orders on hand at any time in the previous history of the company.

PROFIT AND LOSS ACCOUNT

Sales billed	\$26,129,317.31
Cost, including depreciation and development expenditures	19,144,106.72
Factory profit	\$6,985,210.59
Selling, publicity, administrative and general expenses	1,906,264.01
Manufacturing profit	\$5,078,946.58
Other income—	
Interest, discounts, royalties, commissions, etc.	229,843.93
Balance	\$5,308,790.51
Deduct—	
Amount reserved for federal income and war excess profits taxes and contingencies	1,298,300.00
Net profit carried to surplus	\$4,010,490.51

Financial and Construction

Railway Financial News

ALABAMA, TENNESSEE & NORTHERN.—The United States District Court at Mobile, Ala., on May 20 issued a decree of sale of this road which has been in the hands of receivers since November 22, 1915.

CANADIAN NORTHERN.—The Board of Arbitration appointed to fix a value for the \$60,000,000 capital stock of this company, not previously owned by the Dominion Government, and now acquired or authorized to be acquired by it, gave out its decision May 26. On the basis that the depreciated value of assets exceeds the liabilities by not less than \$25,000,000 (contrasting with the company's figures of \$85,000,000 and the government counsel's \$22,000,000), and having given consideration also to the prospective earning capacity of the system, the arbitrators conclude that the \$60,000,000 stock October 1, 1917, was worth \$10,800,000. The Act of Parliament, however, limits the award to not exceeding \$10,000,000.

CHICAGO, MILWAUKEE & ST. PAUL.—The directors met on May 29, but again took no action on the dividends which were due March 1. This is the fifth successive monthly meeting which has occurred without any decision on the semi-annual dividends due last March. Failure of the directors to take action on either the preferred or common dividends which would normally have been declared in January, combined with the facts that the company's articles of association prohibit payments of dividends for any period during which they were not earned and that the St. Paul's profits last year were equivalent to only \$3.85 a share on the preferred stock, or little more than enough to meet the semi-annual payment made last September, make it seem probable that no further dividend on either stock can be declared out of 1917 earnings. This does not, however, mean that, with the conclusion of the contract with the Government, now under negotiation, regular dividend on the preferred, at any rate, may not be paid in future. The next meeting of the board will be held on June 27 when it is expected that some action will be taken on the dividend question provided the contract with the government is signed in sufficient time.

NATIONAL RAILWAYS OF MEXICO.—Rafael Nieto and Mario Mendez have been appointed chairman and vice-chairman, respectively, of the board of directors. Mr. Nieto will act as executive president of the company succeeding Alberto J. Pani, resigned.

NEW YORK, NEW HAVEN & HARTFORD.—See editorial comments elsewhere in this issue.

Railway Construction

CANADIAN GOVERNMENT RAILWAYS.—Plans are being made to carry out work on the western lines during the next year as follows: District No. 2, double 16-ft. reinforced concrete culvert and fill to replace pile trestle at O'Brien, Superior district, mile 30.2, to cost about \$45,000; district No. 3, main line, 8-ft. by 10-ft., stream tunnel and fill to replace timber trestle at Winnipeg, Superior district, mile 47.1, to cost about \$60,000; district No. 3, 50-ft. deck plate girder and fill to replace timber bents, Grand Trunk Pacific branch, Fort William, Superior district, mile 27.7, to cost about \$22,500, and 10-ft. by 10-ft. stream tunnel and fill to replace timber bents at Fort William, Superior district, mile 41.3, to cost about \$59,000; double 16-ft. reinforced concrete culvert and fill to replace timber bents at Raith, Superior district, mile 118.1, to cost about \$52,500, and 10-ft. by 10-ft. stream tunnel and fill to replace timber bents at Raith, Superior district, mile 124.4, to cost about \$30,000.

CLOCKS IN RUSSIA ADVANCED TWO HOURS.—Beginning May 31, clocks throughout Russia were advanced two hours in order to save light and fuel.

Railway Officers

Executive, Financial, Legal and Accounting

Bond Anderson, freight claim agent of the Southern Railway, with office at Atlanta, Ga., has been appointed assistant comptroller, with office at Cincinnati, Ohio, vice **E. Miller**, resigned.

William Kissam Vanderbilt, Jr., vice president of the New York Central Lines, with headquarters at New York, has been elected president, to succeed **A. H. Smith**, who has



W. K. Vanderbilt, Jr.

resigned because of his position as regional director. Mr. Vanderbilt was born on October 26, 1878, at New York, and was educated at Berkeley, St. Mark's and Harvard College. He began railway work in December, 1903, with the New York Central & Hudson River under vice-president **W. J. Wilgus**. Upon the acquisition by the New York Central of the majority ownership of certain trolley lines of the Mohawk Valley Company, in 1905, he was made vice-president of the Mohawk Valley Company and

other subsidiary trolley lines. In July, 1910, he was appointed assistant to the president of the New York Central & Hudson River, and on March 7, 1912, was elected vice-president of the New York Central Lines. In January, 1914, he was made a member of the finance committee.

Charles Augustus Peabody, president of the Mutual Life Insurance Company of New York, has been elected president of the Illinois Central to succeed **C. H. Markham**, who has

resigned because of his position as regional director. Mr. Peabody does not pretend to have any special knowledge of railway operation and has taken the office temporarily to look after the corporate interests and tide over the present period of transition. Mr. Peabody was born on April 11, 1849, at New York, and is a graduate of Columbia University. He is also a vice-president and a member of the board of managers of the Delaware & Hudson; a director of the Illinois Central, the Union Pacific, the New



C. A. Peabody

York & Harlem, the Baltimore & Ohio, and Wells Fargo & Co.

Operating

W. P. Lamb, chief clerk in the Chicago office of **A. H. Smith**, president of the New York Central, has been promoted to assistant superintendent of the western division, with headquarters at Chicago, succeeding **E. W. Brown**, effective May 15.

J. R. Banks has been appointed trainmaster of the Coal & Coke, with office at Charleston, W. Va., vice **R. E. Samples**, resigned.

A. E. Pistole, trainmaster on the Texas & Pacific at Marshall, Tex., has been promoted to superintendent of the Rio Grande division, with headquarters at Big Springs, Tex., succeeding **W. M. Kent**, transferred to Ft. Worth, Tex., in place of **W. H. DeFrance**, transferred, effective June 1.

Earl W. Brown, assistant superintendent of the western division of the New York Central, with headquarters at Chicago, whose promotion to superintendent at Alliance, Ohio, was announced in the *Railway Age* on May 31, was born on April 7, 1871. He began his railway career on June 5, 1887, as a track laborer on the Lake Shore & Michigan Southern, following which he was freight brakeman, car tracer and clerk in the trainmaster's office. On November 15, 1902, he was appointed yardmaster, and subsequently became assistant trainmaster and trainmaster. On December 15, 1913, he was appointed assistant superintendent of the western division of the New York Central lines at Chicago, which position he held until his recent promotion, as mentioned above.

Edward Clemens, chief clerk to general manager of the Terminal Railroad Association of St. Louis, has been promoted to superintendent of car service, succeeding **W. T. Aylesbury**, assigned to other duties.

Mr. Clemens was born in St. Louis County, Mo., in 1884, and began his railroad career as a messenger in the freight department of the Terminal Railroad Association of St. Louis, 17 years ago. He was chief clerk in the traffic department of that road for a number of years, and from that position was advanced three years ago to chief clerk to the general manager. Mr. Clemens' promotion to superintendent of car service of the Terminal Railroad Association of St. Louis was effective on May 22.



E. Clemens

J. E. Snedeker has been appointed superintendent of the Wichita division of the Missouri Pacific, with headquarters at Wichita, Kan., and **M. McKernan**, acting superintendent at that point, has been appointed superintendent of the southern Kansas division, with headquarters at Coffeyville, Kan., succeeding **R. G. Carden**, effective June 1.

Pocahontas Region

In Circular No. 1, issued under date of June 1, **N. D. Maher**, regional director of the Pocahontas Region, announces the appointment of three federal managers, covering the roads included in the Pocahontas Region, as follows:

George W. Stevens, president of the Chesapeake & Ohio, as federal manager of the Chesapeake & Ohio east of Louisville, Ky., Columbus and Cincinnati, Ohio, including the Chesapeake & Ohio Northern, with office at Richmond, Va.

A. C. Needles, vice-president of the Norfolk & Western, as federal manager of the Norfolk & Western, including the Virginia & Carolina Railway and the New River, Holston & Western, with office at Roanoke, Va.

J. H. Young, president of the Norfolk Southern, as federal manager of the Virginian Railway, with office at Norfolk, Va.

Until further notice, the terminals of all railroads at Norfolk and Portsmouth and the Norfolk & Portsmouth Belt Line Railway will be under the jurisdiction of the federal manager of the Norfolk & Western. Terminals at Newport News will be in charge of the federal manager of the Chesapeake & Ohio.

In Circular No. 2, Mr. Maher also announces the following appointments:

T. S. Davant, vice-president of the Norfolk & Western, as the traffic assistant of the regional director, and of **D. E. Spangler**, general superintendent of transportation of the Norfolk & Western as transportation assistant to the regional director. Both will have offices at Roanoke, Va.

Traffic

J. H. Mara has been appointed industrial commissioner of the Missouri Pacific, with headquarters at St. Louis, effective June 1, succeeding **D. E. King**, deceased.

W. P. Behen, general agent of the Cincinnati, Indianapolis & Western, at Chicago, has left the service of that company to go with the Liberty Steel Products Company, as sales agent, with headquarters at Chicago.

Following the elimination of certain passenger and freight traffic positions recently by the Railroad Administration, the Chicago & Alton has made the following appointments, effective May 28: **Barth Reidy**, general agent at Indianapolis, Ind., has been appointed district traffic agent, at Kansas City, Mo.; **James Mann**, district freight agent, at Springfield, Ill., has been appointed district traffic agent, at Springfield; **S. B. Wade**, general agent, at Little Rock, Ark. has been appointed district traffic agent, at Bloomington, Ill.; **C. E. Norris**, division freight and passenger agent, at Mexico, Mo., has been appointed district traffic agent at Mexico; **E. C. Meyer**, general agent, at Milwaukee, Wis., has been appointed district traffic agent at Chicago. **Will G. Howard**, general agent, at Pittsburgh, Pa., has left the service.

Engineering and Rolling Stock

John Vass, road foreman of engines of the Grand Trunk, at Battle Creek, Mich., has been appointed assistant master mechanic of the Ontario lines, with headquarters at Allandale, Ont., in place of **J. R. Donnelley**, retired.

E. W. Smith, who has been appointed superintendent of motive power of the Central division, of the Pennsylvania Railroad, with office at Williamsport, Pa., as has already been



E. W. Smith

announced in these columns, was born at Charlesburg, W. Va., on September 21, 1885. He is a graduate of the Virginia Polytechnic Institute, and he entered the service of the Pennsylvania Railroad on August 1, 1906, as a special apprentice. On July 26, 1909, he was made motive power inspector, was advanced to motive power foreman on September 1, 1912, and on October 15, 1913, he was appointed assistant master mechanic at the Altoona machine shops. On July 1, 1916, he was advanced to assistant

engineer of motive power in the office of the general superintendent of motive power at Altoona, and on October 10, 1917, he received his appointment as master mechanic of the Philadelphia division, with office at Harrisburg, which position he held at the time of his recent appointment as superintendent of motive power of the same road as above noted.

Railway Officers in Government Service

P. E. Hennessey has been appointed joint livestock agent at the National Stock Yards district, East St. Louis, Ill.

George R. Loyall, assistant vice-president of the Southern Railway, has been appointed assistant to **B. L. Winchell**, Regional Director of the Southern district, with office at Atlanta, Ga.

Thomas L. Lipsett, district passenger agent of the Pennsylvania Railroad, with office at Washington, D. C., has been appointed by the Railroad Administration as district passenger agent representing the Washington terminal lines, with office at Washington.

George Hodges, who has been appointed manager of the troop movement section of the division of transportation of the Railroad Administration, with office at Washington, D. C., was graduated from St. Paul's School at Concord, N. H., and entered railway service in 1886 with the Erie. He remained with that road until 1903 when he entered the service of the Baltimore & Ohio. In 1908 he was appointed assistant agent for the receivers of the Seaboard Air Line. At the expiration of the receivership in 1910, he took up the work of the Special Committee on Relations of Railway Operation to Legislation, which was then under the chairmanship of the late F. O. Melcher, vice-president of the Chicago, Rock Island & Pacific, and in 1912 he became secretary and treasurer of that committee, and also assistant general agent of the American Railway Association, with headquarters in Chicago. In April, 1916, he was elected chairman of the Committee on Relations between Railroads, of the American Railway Association, and in this position he was also chairman of the Per Diem Rules Arbitration Committee, and chairman of the American Railway Association Committee on Weighing and on the Marking, Packing and Handling of Freight.

R. Walton Moore, of Washington, D. C., and Fairfax, Va., who for many years has been special counsel for most of the southern railway and steamship companies as their representative in matters before the Interstate Commerce Commission and in litigation growing out of commission proceedings, has been appointed assistant general counsel of the United States Railroad Administration in charge of affairs before the commission. Mr. Moore was born in Fairfax, Va., and graduated from the Episcopal High School of Alexandria, Va., and from the University of Virginia. He began the practice of law at Fairfax and is still nominally member of a firm in Fairfax which has a large practice. He has been one of the leading lawyers of Virginia, and had represented various steam and electric railways in northern Virginia in connection with his general practice, when in October, 1907, he was appointed assistant special counsel for the southern railway and steamship lines as assistant to Judge Edmund Baxter of Nashville. Six years ago, on the death of Judge Baxter, he was appointed special counsel, and his firm has been one of the most prominent in this class of work. Mr. Moore for a time was a member of the state senate of Virginia; was a presidential elector on one occasion, and was chairman of the legislative



George Hodges



R. W. Moore

committee of the state constitutional convention, which framed the constitution of Virginia in 1902. He served for several years as a member of the Board of Visitors of the University of Virginia, and of William & Mary College, and was for a time president of the Virginia State Bar Association.

G. H. Parker, assistant comptroller of the Philadelphia & Reading Railway, has been appointed assistant to **Walker D. Hines**, assistant director general of railroads, with office at Washington, D. C.

H. B. MacFarland, engineer of tests of the Atchison, Topeka & Santa, at Chicago, and **G. M. Davidson**, chemist and engineer of tests of the Chicago & North Western, at Chicago, have been appointed members of the inspection and test section of the United States Railroad Administration for the western railroad region. Mr. MacFarland has also been assigned to one of the 18 districts which have been created for the inspection and testing of materials which will be used in the construction of the car and locomotive equipment recently ordered by the Government. His district will comprise southern Ohio and the territory tributary to St. Louis. **F. Zeleny**, engineer of tests of the Chicago, Burlington & Quincy, has also been assigned to this work for the district comprising Chicago and surrounding territory.

Obituary

Charles E. Benton, formerly general attorney for the Missouri Pacific, at Ft. Scott, Kan., died at his home in Los Angeles, Cal., on February 23. Mr. Benton was born at Astoria, Ill., on December 12, 1857. After graduating from the high school at Lewiston, Ill., he studied law and later was admitted to the bar, after which he went to Iola, Kan., where he engaged in the general practice of law. There he served two years as county attorney. In 1884, he was appointed assistant attorney of the Missouri Pacific for southern Kansas, and in 1890 was transferred to Ft. Scott, Kan. He was later appointed general attorney, to succeed **J. H. Richards**, and served in that capacity until January 1, 1914, when he resigned on account of failing health. Since that time he resided at Los Angeles, Cal.

Col. Joseph Harvey Richards, formerly general attorney of the Missouri Pacific, at Ft. Scott, Kan., died in that city on April 17. Colonel Richards was born at Spencer, Kan., on April 7, 1844. He received his education at Wabash College and read law with Gen. Lew Wallace. In the early eighties Colonel Richards was appointed general attorney for the Missouri Pacific at Ft. Scott. He served that company in this capacity for a period of 26 years, and during that time he was also receiver of the St. Louis, Ft. Scott & Wichita, and directed the construction of the lines between Wichita, Kan., and Hutchinson, and between Eldorado, Kan., and McPherson. In addition, he was president of the construction company which built the Missouri Pacific branches from Ft. Scott to Rich Hill, Mo., and from Ft. Scott to Pittsburg, Kan. Several years ago Colonel Richards was forced to retire on account of failing health, and at that time was succeeded by Charles E. Benton, whose death is also announced in this issue.

OPERATION OF ALGERIAN RAILROADS.—Algeria has a total of 2,320 miles of railroad, of which 1,513 are State owned and 807 miles privately owned. The former are not only owned, but are operated and maintained by the Government and the profits are turned into the national treasury. With regard to the private lines, the Government guarantees the interest charges and controls the traffic. The total receipts of the State lines in 1916 amounted to \$6,228,755 and of the private lines \$5,302,557.—*Commerce Reports.*

TRAFFIC ON NEW ZEALAND RAILROADS IN 1917.—The New Zealand railways for 1917 carried 14,173,115 passengers, as compared with 14,201,506 for 1916, of whom 355,832 passengers traveled on season tickets, as compared with 330,622 for 1916. During the year there were 6,239,172 tons of freight carried, as compared with 6,370,946 tons for 1916. This was accomplished notwithstanding the considerable reduction in the number of trains run and the increased passenger and freight rates.—*Commerce Reports.*